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LEADING ARTICLES

ADENOIDS.

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ALTHOUGH the pathology and therapy of adenoid vegetations in the vault of the pharynx have been covered hundreds of times by the pen of experienced and able workers, still daily experience impresses upon the throat specialist the fact that there are many general practitioners who fail to remember the fact that William Meyer in 1870 taught the scientific world, that scores of children, who are forced to breathe continuously through the mouth, the air passage through the nose being blocked, who have to struggle all night with difficult breathing (snoring), who represent anemic debilitated condition of health, who suffer continuously from colds, coughs and earache, and who are often very deaf, that all these children can be relieved in the shortest space of time from their ailments by a short and miraculous surgical interference: the removal of adenoids. Thirty-six years have passed since this discovery, but still children are brought to the office daily, not so often by the family physician, as by intellectual parents, whose darlings show the ineffaceable traces of the long years of nasal respiratory obstruction and altered type of respiration in their peculiar deformity of face, in the physique of the lungs and entire mental and bodily development. Are we not moved by pity and indignation that these things should go on for years without medical suggestion of the proper kind until all these conditions become nearly irreparable? We ask modestly are these children, in whom the diagnosis may be made by merely glancing at the patient at a distance, never seen by a physician? Sad to relate, they have been seen over and over again. They were treated with all kinds of tonics; were sent to summer resorts, to another climate; and the parents have done everything to have their children cured. However, the one so obvious advice, which constitutes the quickest and simplest cure, that is, the removal of the adenoids has never been suggested, due to lack of intelligence or perhaps forgetfulness. I can think of no other explanation. Even if the suggestion urging the advisability of such an operation was made by the parents it was suppressed by the medical adviser, who tells them that the operation is dangerous, or that the adenoid in a growing child would disappear gradually in the course of years or by the use of the much talked of breathing exercises, also if removed that they would reappear. All these suggestions are wrong or nearly so. Adenoids of a large volume never shrink of themselves, or without surgical interference to such an extent that they cease to produce all the detrimental influences, especially with regard to the pharynx and nose (catarrh and irritation and occlusion of the Eustachian tubes). In the meantime, while we are waiting for their disappearance, the persistent purulent discharge and deficient aeration of the lungs will have produced chronic gastritis and anemia, chronic bronchitis and a predisposition for the onset of tuberculosis of the undeveloped and weakened lung. On the other hand, the chronic obstruction of the Eustachian tubes and lack of middle ear ventilation, together with the existence of acute inflammations, have created irreparable fixation of the drum and ossicles and hardening of the mucous membrane lining of the middle ear. Then the other suggestion: Breathing exercises. I have no hesitation in saying that I don't believe for a moment that any child who has well marked adenoids has been or ever will be cured by breathing exercises, whether the adenoid will be secondary to the nasal

catarrh or not, there can at any rate, be no doubt in well marked cases that they obstruct the air passages, and must thereby certainly prevent that ventilation of the lungs which is of such enormous importance. It logically follows that the obstruction, whether primary or secondary, must be gotten rid of as a primary step, towards enabling the patient to breathe freely and ventilate his lungs. This the surgeons have accomplished in the quickest and most complete manner by operation, just as they would do in an analogous case in any other part of the body. However, the "breathing exercise" enthusiasts claim to produce a disappearance of the condition by the simple instructions: To put the child on its back three times a day for a half an hour at a time and make it breathe in and out as deeply as possible through the nose, the mouth being kept shut.

But do the adenoids disappear? Certainly not, on the contrary, they flourish. How can half an hour's oxygenation of the blood three times in twenty-four hours alter the constitution in such a miraculous way as to make the actual obstruction of the air passage disappear? It is my opinion, that the so highly praised breathing exercises for curing adenoid vegetations appear simply in the light of a scientific glorification of the obsolete advice so freely administered to the unfortunate sufferers, before William Meyer's beneficent discovery: "Keep your mouth shut, shut your mouth." I do not mean to state, that after the removal of the adenoids, well conducted breathing exercises are not of the greatest benefit to develop the lungs and to improve the general state of health.

Now as to the imputation that the adenoids, although operated on, will grow again: To understand this limitedly true accusation often justly made, we must remember that the operation has since 1870, for years has been the private property in the hands of a few specialists and surgeons in hospitals, but by the general medical world was despised and maltreated. After 1890, the operation became the rage of the day; everybody performed it; everybody gave the anesthetic. The once limited indications became rapidly extended, especially when reflex neuroses became fashionable, and ultimately it seemed that every child required an operation for adenoids. The enthusiasm was followed soon by bitter disappointment on the part of the parents when the recurrence of removed adenoids occurred with a frequency never heard of in former days. The question asked by parents who were advised to have their child operated upon: But don't they always grow again? was and is justified. The operation fell extremely into dis-use and its prestige was partly damaged by wholesale performances in cases in which, to say the least, it was not indicated. Further, by faulty, or at least extremely hypothetical indications, and in but too many instances technically too insufficient execution, then by a dread of chloroform and a widespread reputation of reoccurrences due only to the faulty and incomplete execution. Thus we see, that the miscredit of the operation is at least somewhat justified, because too many operations of slip-shod performance are being made. It is the duty of the specialist to prevent a good operation from falling into bad repute, and hence we have to come necessarily to a much more precise understanding as to the conditions under which operative interference should be recommended and as to how it should be carried out.

In regard to the question of operation, adenoids may fitly be divided into three classes, accordingly as they cause (a) permanent, (b) periodical or transitory, or (c) no symptoms. The first class (typical) embraces the cases in which the nasopharyngeal cavity or vault is crammed full of genuine adenoid vegetations, compressing the Eustachian tube openings, and closing half of the posterior nasal openings. This causes obstruction to these passages, and consequent upon this, are open mouth, night snoring, thick voice, chronic and nasal catarrh and usually bronchial catarrh. Obstruction of the Eustachian tubes leads to deafness. The altered type of respiration may have already led to the peculiar deformities of the face and chest (pigeon chest) and to a general debilitated state of health. In this class, from a very large experience, I consider operation absolutely indicated, and do advise it the more strongly, the more distant the child is from the age of puberty. It makes no difference how young the child may be. The often heard objection, "the child is too young," is not at all justified. The earlier the removal, the better for the child. Even if the condition should never become complicated, as it so often is in these cases by inflammatory ear affection, or by one or another of the febrile diseases of childhood. The mere alteration of the natural type of breathing and the different aeration of the lungs, will if unrelieved for years leave their ineffaceable traces on the physiognomy and physique of the lungs and entire mental and bodily development of the patient. Considering that all the serious consequences of the obstruction of the natural air passages and hearing channels can be prevented by so simple and comparatively safe an operation as the removal of the adenoids, I hold it to be the practitioner's duty to strongly urge operation

in this class of cases, the result of which under these circumstances, is always very gratifying and often truly astounding. The question is more difficult in the second class, in which free intervals alternate with the periods of nasal obstruction.

The results are: Abundant nasal or pharyngeal catarrh and impairment of hearing or attacks of earache in the advent of acute or subacute otitis media. This is a category in which hypertrophy of adenoid tissue is moderate, producing when free of catarrh, not marked nasal obstruction symptoms or others, but in which in the slightest catarrhal provocation so much congestion and engorgement occurs that for a time all the symptoms of the first class are evident. In these cases there is some difficulty in giving the correct advice in regard to operation, because the view-point of the various advisors may diametrically differ according to the time at which the little patient is seen, be it in the relatively favorable interval of grave symptoms or during the acute attack of engorgement of the adenoids along with its consequeances (profuse catarrh, earache, impaired hearing, and obstruction of the nasal passage). To be a good and impartial adviser, we should resort to a thorough digital or mirror examination and to an exact investigation of the history of the case. If we find that in addition to small adenoids, that there are repeated attacks of cold in the head with persistent catarrh, attacks of earache with or without perforation of the drum; with the presence of enlarged or painful deepseated cervical glands; with a family history of tuberculosis, we then advise the operation. Repeated attacks of transitory deafness or earache due to colds in the head or abundant catarrh, should always indicate operation.

These subacute middle ear inflammations without perforation, are often overlooked and produce, if neglected and often repeated, slow and gradual thickening of the lining mucous membranes of the middle ear, organization of the retained exudation and fixation of the drum and chain ossicles. If the above mentioned attacks are infrequent, and if the child in the meantime should enjoy good health, with free nose breathing, no sign of deafness and only some soft swelling of the adenoids in the vault of the pharynx with no suppuration, it is advisable to postpone the operation. If the attacks be often repeated, it is evident even in small sized adenoids without marked obstruction of the nasal passage, but with a tendency of the adenoid tissue to become inflamed and produce a muco-purulent or purulent discharge, we should operate in order to prevent the constant occurrence of colds, chronic pharyngeal and nasal catarrh, reflex coughing and consequent bronchial catarrhs.

Concerning the third class of adenoids, I have only to repeat that those which do not cause any symptoms, do not require removal. We often, in the course of methodical examination of the upper air passages, discover a considerable amount of lymphoid tissues in the vault of the pharynx which evidently has never done any harm, just as one often sees somewhat enlarged tonsils which have never caused inconvenience. Such innocent hypertrophies one should never tamper with. On the other hand, in pharyngeal catarrh of adults we should always examine the vault of the pharynx to detect a possible diseased remainder of adenoid tissue. Reflex coughing and stringy purulent discharge dropping down and irritating the pharynx, will never cease until all the diseased adenoid tissue is removed.

Finally in regard to the question of the necessity of the adenoid operation on account of the reflex neuroses, I must confess that I have not been able to bring myself to the belief that asthma, epilepsy, enuresis and similar neuroses which have been ascribed to adenoids were really due to them; hence I would not advise operation in small adenoids, if there are no other pathognomonic symptoms as the above mentioned reflex neuroses. If there were besides reflex neuroses, other tangible symptoms of respiratory or auditory obstruction and catarrhal symptoms, one has to explain in order to avoid disappointment, that the operation is to be undertaken for the sake of removing the obstruction which interfered with breathing, hearing, general development, but that no strict promise can be given as to the cure of the reflex neurosis.

Naturally, the improved state of health following the removal will have a sedatory influence in the neurotic condition, which causes the reflex neuroses. In regard to the diagnosis of the existence of adenoids, we never should rely upon a diagnosis "per distance," that is, drawing conclusions from the facial appearance—the adenoid's face—or the nasal obstruction, as deformities of the nose itself and of the hard palate as well as enlargement of the posterior extremities of the lower turbinated bodies, which may closely simulate the symptoms produced generally by adenoids. Before we decide for operation, we should make a thorough examination by means of a small mirror, the soft palate being lifted and pulled forward by means of a blunt hook. If this process is impossible, a thorough digital examination should be made in order to determine the extent of the adenoid tissue, especially to

what extent the upper arch of the choanae is filled, and the tube lips or Rosenmueller's fossae are covered.

Concerning the operation itself, I think that that mode is best by which the adenoids can be removed in the most thorough manner with the slightest amount of hemorrhage and with the least danger with regard to asphyxia, by dropping of adenoid fragments into the larynx. In former years I employed the German method of operating, in the sitting position with or without ethyl chloride or brom-ether narcosis. This position gives us the best opportunity to reach the pharyngeal vault with our curettes in the most favorable position, but the operation in this position must be carried out in a very short time, due to the short anesthetic. On the other hand, the hemorrhage covers the field of vision and is liable to coagulate with fragments of the adenoid and produce asphyxiation by dropping into the larynx.

Especial difficulties arise when fragments of adenoids partly severed adhere to the pharyngeal wall. They must be carefully detached from the pharyngeal mucous membrane by means of a scissors. To perform the operation without an anesthetic is possible in a very few strong children if they are easily controlled and not sensitive at all, as is sometimes the case, and then the sitting position is the best. The English method is the recumbent position of the patient, the head well bent over the back of the operating table. Here the danger of loose adenoid fragments, or of blood entering into the larynx is excluded. However, the hemorrhage is extremely severe, due to the engorged neck and face veins, and the field of vision is covered by the blood running down, so that one cannot recognize shreds or portions of the growths adhering to the posterior wall or lateral folds of the pharynx. In recent years, therefore, I have followed the suggestion of Holmes of Cincinnati, to operate with the child lying on its left side. The left arm and shoulder being drawn back so that the former lies on the table behind its back. The right arm being grasped near the shoulder joint by an assistant on the opposite side of the table who forces that half of the shoulder girdle away from the chest, so as to secure ample breathing space. The table is raised at the foot and rests upon blocks eight inches high. In this position all the blood flows out of the mouth, none getting into the larynx, and the field of vision is clear. The only drawback is, that this position does not give favorable access for the introduction of the instruments of the operator, as the latter has to be in a strained and unnatural position. I always use chloroform carefully, but producing a deep anesthesia, so that the reflexes of the pharynx just begin to disappear. The chief factor in this operation is thoroughness, especially not neglecting the upper arches of the choanae or Rosenmuller's fossae behind the Eustachian tube lips. Due to the difficulty of introducing instruments into these spaces adenoid tissue is apt to be overlooked, later on giving rise to an abundant secretion and suppuration of the underlined submucous tissue which is here very elastic. Loewenberg's forceps are resorted to in this locality, and in order to clean out the upper arches of the posterior nares, we have to apply a very slender biting forceps, inserting it through the lower meatus of the nose.

To repeat, the adenoid operation if carried out in such a manner that entirely all adenoid tissue is removed is a difficult operation. It is a fact that one-third of the patients coming to a specialist for this condition have been previously operated upon by general practitioners and there has been a recurrence. One of the most important phases, and that which is most neglected by the unskilled post-operative treatment. This cannot be begun until three days have elapsed after the operation because of the hemorrhage of the cut parts. After the lapse of three days cocaine is applied to the tissues and with a Loewenberg's forceps, any small unremoved particles may be removed with little or no pain. Nothing has so much damaged the reputation of this operation as the fact, that so often are these small particles overlooked and the patient discharged as cured. The old symptoms will arise again after a lapse of several weeks if the operation has not been successfully carried out. The parents then seek other advice, and when they are told that the operation must be performed again, it is but natural that they should exclaim, "But don't they always grow again."

I saw the other day, a case in which the operator had gone to such an extreme of thoroughness that ugly adhesions had formed in the nasal pharyngeal cavity and between the soft palate and the pillars of the fauces, the entire posterior wall resembling that of the cicatrisatide in tertiary congenital syphilis.

As to the after-treatment: I only advise injections and not syringing in cases of persistent slight hemorrhages. For this injection I use normal salt solution containing 2% dioxygen, dropping it into the nares. Since my disuse of antiseptic syringing, I never have any middle ear complications. If there is to be any pus formation, it will appear the third day. To counteract this I prepare an argyrol solution to be used three times daily,

pouring in each nostril four to five drops of 5% argyrol solution. This will in all probability prevent further suppuration. In the cases of children afflicted with adenoids, the fact that they have never breathed through the nasal passages before, will make it necessary that this should be made a practice after the operation. The children should be constantly told to keep the mouth closed, and if the children do not obey strictly, some simple contrivance to keep the mouth closed should be obtained.

Breathing exercises, cold sponging of the chest and back, followed by brisk friction, games and exercises in the open air are all further aids to the establishment of the normal respiratory modus.

The breathing may also be aided by insisting upon slow, thorough and prolonged mastication, as during this act respiration becomes automatically nasal. Out of this reason Friedenburg considers the otherwise awful habit of gum chewing for children, to be used temporarily after operation, as a valuable aid in re-establishing nasal respiration.

THE USE AND ABUSE OF THE REST TREATMENT.*

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JACKSONVILLE, ILL.

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It is needless for me to come before you with a defense of the Rest Treatment, for any treatment which for nearly thirty years has maintained the place in rational therapeutics, which it occupies, is its own defense. The rest treatment has been adopted in all countries where progressive medicine claims attention and receives the homage due it. It was evolved by S. Weir Mitchell, of Philadelphia, the Nestor of American Neurology, whose genius prompted him to the original and painstaking observations, from which was originated the rest treatment with its technique, now so universally adopted and practiced throughout the civilized world. Those of you interested in the history of medicine and especially of events which mark an epoch in the practice of medicine, will find in Dr. Mitchell's recital of the evolution of this treatment, a source of interest and of enthusiasm, such as comes to us all when we read of historical triumphs in other fields of progress and inquiry. Dercum, in speaking of the inauguration of the rest treatment to apply to the treatment of neurasthenia and hysteria, says: "It is difficult at this day, more than a quarter of a century after Weir Mitchell's first utterance upon this subject to appreciate the importance and the radical character of this innovation in therapeutics. In the treatment of chronic affections, as in that of acute diseases, physicians had been in the habit of relying almost exclusively upon medicines; and, when other remedies, such as massage and electricity, were employed, they were used in an independent and isolated manner. They were not incorporated as parts of any one method or plan of treatment, and, as regards rest, it is safe to say that up to the time of Mitchell, no one had had any adequate conception of its importance or of its great therapeutic power. No one had ventured to employ it in so radical a manner nor in a way involving weeks and months of continuous stay in bed. The ill effects of excessive rest, of insufficient exercise, had been vaguely recognized, but no one had attempted to combat the disadvantages of rest, to rob it of its harm by the application of corrective procedures; no one had attempted to formulate a plan of treatment in which rest should be the main therapeutic measure, rest so guarded and corrected that none of its evils, only its benefits should accrue to the patient. It is in this achievement which belongs to Weir Mitchell, an achievement which is distinctly and solely his. The rest cure is essentially a cure by physiologic methods and this alone is sufficient to give it the stamp of originality."

Now, what is meant by the rest treatment? It is a treatment founded upon the principles of rest with such adjuvants as will contribute to keep simultaneously and methodically both physical and mental factors in view, so that in restoring "fat and blood," under appropriate envirnoment, the will-loss, moral delinquency and perverted emotional states, will be overcome. The foregoing implies that the range of treatment is perhaps limited to the neurasthenic and hysterical classes of cases. This in part is true, but I have found it applicable to a wider range of cases of mental disease; so much, in fact, that I have for the past four years used it extensively in this line of practice. This mode of treatment has proven remarkably efficient in borderline mental cases, especially the mental disorders of adolesence; in serious and seemingly inveterate senile forms of mental disorder; in manic-depressive cases of mental disease; in melancholia, simple and mixed forms; in subacute states of delirium (amentia); in exhaustion psychoses and in habit cases.

*Read before the Tri-State Medical Society (Alabama, Georgia and Tennessee) at Chattanooga, Tenn., September 26, 1905.

However, the rest treatment is best known as associated with the class of cases for which it was primarily designed, viz: the neurasthenia of women in which the mental asthenia and the denutrition of the body that follows on insufficiency in the amount of food taken; these lend one another mutual support and combine in keeping up indefinitely the nervous exhaustion. Mitchell's originality in the rest treatment, to which he modestly claims, lies in the systematic association of isolation, rest, massage, electricity and special regulation of diet or diotherapy. The success or failure of the treatment depends upon how rigidly these essentials are emphasized and insisted upon. Again, the selection of cases suitable for such treatment requires careful consideration and an accumulated experience in nervous diseases. Mitchell, himself says, regarding this last point, "It runs, indeed, the risk of being employed in cases which do not need it and by persons who are not competent, and of being thus brought into disrepute." To bring before you the technique of treatment, I want to briefly touch upon the essential elements of treatment and the reasons for their adoption. Of the first importance in successfully managing a case wherein rest treatment is indicated, it is necessary that the patient be isolated from the environment in which she has generated the nervous exhaustion and where conditions even at best cannot be made suitable for proper rest treatment. Isolation or seclusion, as Mitchell calls it, must be complete. Comparative isolation is not worth the time or money spent to keep it up and only brings trouble upon all concerned in its execution and ends in the condemnation of the "rest treatment." My rule is imperative, isolation, and in explaining to the patient's friends, I liken the isolation to a splint, which when once applied correctly is not to be removed daily to see how things are doing. No! isolation is necessary, and I quote the reason for it as explained by Mitchell—"It is needful to disentangle them (the patients) from the meshes of old habits and to remove them from contact with those who have been the willing slaves of their caprices. I have often made the effort to treat them where they have lived and to isolate them there, but I have rarely done so without promising myself that I would not again complicate my treatment by such embarrassments." This has been my unfortunate experience and I now prefer to retire from a case, than, in a haphazard way, attempt to carry out rest treatment at home. Dr. Mitchell further says, "Once separate the patient from the moral and physical surroundings which have become part of her life (the patient's life) of sickness, and you will have made a change which will in itself be beneficial and will enormously aid in the treatment which is to follow." This applies to that class of women, "a large and troublesome class of thin blooded emotional women for whom a state of weak health has become a long and almost, I might say, a cherished habit." For them there is often no success possible until we have broken up the whole daily drama of the sickroom, with its selfishness and its craving for sympathy and indulgence." Nor should we hesitate to insist upon this change, or not only shall we then act in the true interests of the patient, but we shall also confer on those near to her an inestimable benefit."

How true these remarks are can only be appreciated by physicians who have had to face such a problem and have attempted to care for such a case at home. I see in consultation many of these sad pictures and many of them have come under my care after exhausting every conceivable tentative measure that would put off that inevitable day when the patient's friends exhausted in strength, resolution, and depleted in purse, have come to the realization that not only must systematic and intelligent care be had for physical reasons, but moral decrepitude which is paramount must be met by forcible means. Isolation is the only way to meet that difficulty, but it must be secured under hopeful, helpful and intelligent surroundings where nurses trained to meet the exigencies of such cases can, under the physician's directions, lead these apparent hopeless invalids back to life of usefulness. The nurses function, then, is of a high order and requires character, good sense, intelligence and tact, as prerequisites for success from the nurse's standpoint. The possession of a diploma does not make a nurse for nervous and mental cases, for, in my judgment, it requires the highest order of intelligence to successfully handle a patient, condemned, as the patients claim, for six weeks or months or more isolation from the world with no one but the nurses and physicians as mediums to the outside world. No other visitors are allowed. Upon the physician rests the cultivation of will power, the sub-conscious self by hopeful and intelligent helpful suggestions and by actual demonstration at their side, the improvement and gain of their health of mind and body. The length of time isolation is to continue depends on the progress of the case, an average, I should say, of from six weeks to three or four months or more. My records of about four hundred cases will show an average stay of isolation of about two months, but

some have remained as long as a year, some six months some four months and some six weeks. Men do not endure isolation as well as women; first, because domestic life is not their natural habit; and second, because it is difficult to seclude them, they will break over the rules when convalescence is being established.

Rest.—The second and next importance to isolation in the success of treatment is rest. Now rest, as I understand it and as taught by Weir Mitchell, is not simply reclining on a sofa, nor sitting in an easy chair, nor simply staying in bed. This must be understood if we are to succeed in this part of the treatment; all the time remembering that success as a whole in rest treatment depends upon how intelligently each detail of treatment is carried out. Mitchell in speaking of the rest says: "Whether we shall ask a patient to walk or to take rest is a question which turns up for answer almost every day in practice." "Most often we incline to insist on exercise and are led to do so from a belief that many people walk too little and that to move about a good deal is well for everybody." Mitchell thinks that we are as often wrong as right. A good brisk walk is for well folks a tonic; the same is true for some sick folks, but if exertion gives rise to increase of trouble, to extreme sense of fatigue, to nausea, headache, etc., what are we to do? For these cases, rest, absolute rest, is necessary. Hardly a day goes by but that I meet in my consulting room or in consultation with physicians, cases of abnormal fatigue.

Cases where ordinary physiological rest does not relieve them from the very apparent exhaustion. It is evident that to advise exercise, as is too frequently done, will only add fuel to the flame, and to meet intelligently these problems we must recognize or differentiate normal from abnormal fatigue. The one is overcome by physiologic rest, the other is continuous, as the patient is as tired in the mornings, after rest in bed, as they were on retiring, and so goes the interminable story until the whole problem is realized by the physician and proper means applied to restore normal functions.

Rest as a therapeutic measure is to be prescribed with consideration of the indications in each case. Rest is a relative term and has a wide range of application. Rest, as applied to nervous and mental cases, properly selected, means absolute rest in bed. It means, first, a state of total inactivity; the patient is fed, bathed and cared for in bed. All activity is suspended; no occupation, nor reading, no writing; she must not get up nor even use her hands; in fact, she is treated as if she were the victim of typhoid fever. This rest gives the body an opportunity to re-establish normal functions; it rests the mind, the sense, the muscles, and soothes all pains and other disturbances. With regulated diet, the very varied stomach and intestinal disturbances disappear, but in order to accomplish this and to overcome the disadvantages of inactivity, the gastro-intestinal atony, constipation and general regulation of the muscles and to insure the digestion and assimilation of food, there must be some means to aid in overcoming these serious disadvantages of rest. Disadvantages, too, upon which hinge the failure of the treatment; disadvantages which too many physicians recognize, but go no further in their endeavor to overcome them. It was here where Mitchell's originality showed forth with the genius of a true scientist and observer, when, recognizing these conditions he sought relief in the application of massage.

Massage.—Massage, too, we must remember, which he evolved to meet the special indications as found in these cases of neurasthenia, hysteria and mild mental diseases. The chief indication "was to deprive rest of its evils." For, in the intelligent application of rest, it is found that its usefulness depends upon the care and attention given to massage and electricity. Massage is a much misunderstood physiologic therapeutic measure, even today. There are comparatively few trained in massage according to the methods as evolved by Mitchell, and what passes for massage as given by many nurses, is not satisfactory in nervous and mental cases. I wish that time would permit me to go over every detail of massage manipulations, according to Mitchell's teaching. I would say it requires skill to administer massage, and it requires daily practice to attain the perfection of the art. The technique of Mitchell has a definite purpose in every movement and is free from the over-zealous activity found in Swedish movements or the crude manipulations of osteopathy. It is to be remarked that such movements have no place in the treatment of nervous people; they increase excitement, produce exhaustion instead of ameliorating the conditions. Massage is to be given by trained graduates in the principles and practices of the art. Why massage does good is explained by Mitchell as follows: "The secretions of the skin are stimulated by the treatment of that tissue; . . . under massage the flabby muscles acquire a certain firmness, which at first lasts only a few minutes, but which after a time is more enduring and ends by becoming permanent. . . The muscles are exercised

without the aid of volitional exertion or the aid of nervous centers, . . . a healthful excitation of the vessels and increased flow of blood to the tissues which they feed. . . The visible results as regards the surface circulation are sufficiently obvious, and most remarkably so in persons who, besides being anemic and thin, have been long unused to exercise." In my own hospital, where about two hundred and fifty cases have been under treatment, I have seen adolescent girls anemic, depressed, hysterical and even insane, react under massage, rest and isolation to a degree that is really remarkable. The whole tint of the body changes, a warm healthy glow, full vessels, pink nails, pink cheeks and a wholsome comfort and physical gain results. Bodily weight increases and a new lease on life certainly is the result. The circulation of the blood is improved both superficial and deep, anemic conditions disappear and the wholesome benefits which results are lasting. Massage genuinely given by genuine manipulators who know their business, from principles and practice, is one of the most valuable adjuvants of treatment of nervous diseases of malnutrition. Its value is not appreciated, and every physician should have at his command this valued service. Mitchell says that bad massage even is better than none in these cases in which it is needed.

Electricity.— Faradism applied to the masses of muscles is another adjuvant used to exercise muscles in a passive way. It is not used as often as it should be and when given should be under the direction of one properly trained to administer it. Electricity, unfortunately, in the layman's view, is a mysterious agent, capable of curing most anything of obscure origin, especially along the lines of nervous disorders. It requires a clever operator, trained in the work, to give electricity properly and to know when it is indicated. Its object is to stimulate the activity and nutrition of the muscles and joints, improve general nutrition, stimulate the lymphatic system, digestive organs and improve circulation. In the proper blending of these necessary and important adjuvants of treatment by rest methods, experience will lead to skill in determination of the degree and direction of the treatments, of the character and form of rest and the adjustment of environment to meet the indications during convalescence. This experience can not be detailed on paper very well; and yet it is just here where abuses occur and results are not attained, all of which leads to a condemnation of the rest treatment. Every now and then some one feels he is called upon to cry in the wilderness telling of his discovery of means and methods which are to supersede the Mitchell rest treatment—by occupation, by education, by exercises, by baths, etc., etc., but like all fads they have a mushroom existence which soon tells the tale, while the time-tried methods of Mitchell, like Tennyson's brook, go on, and, we trust, forever.

Diotherapy.—I have not mentioned another and exceedingly important part of treatment, which, as regards the building up of bodily weight and founding permanent capital in fat and blood, is always an important consideration—I refer to diet. Diotherapy is one of the factors in the treatment of nervous and mental diseases little appreciated in practice outside of special practice. Experience and prudence, tact and judgment are required to successfully carry out the indications for diotherapy. It is important first to ascertain the needs of the patient, especially where gastro-intestinal neuroses are features of the disease. To differentiate by careful clinical methods the nature of the neurosis and to plan treatment accordingly. Not infrequently it becomes necessary to make a prolonged examination in order to differentiate between organic and functional disease. Here is where prudence is necessary and experience important for other therapeutic indications that diet must be considered. I think that we should take plenty of time in working out these problems of gastro-intestinal neuroses.

Now, as regards diet, I follow Mitchell's precepts wherever they are indicated. Milk diet is the sheet anchor in almost every case, and rare indeed is the case where milk can not be used, if the patient is approached with tact and consideration. Where milk is the exclusive diet, four to five pints a day are used and given from four to six or eight ounces at a time—the schedule for giving to be determined in each case. Milk is progressively increased and other foods added, egg-nog, toast, bread and butter, etc., gradually adding until a full tray as well as the milk constitutes the daily diet. To assist in digestion, assimilation, etc., it is necessary that the secretions be in good form, and sometimes aids are necessary. Malt extract is given alone, and when constipation is a factor, with cascara, with the object of aiding digestion and impairing the bowel condition. It is to be noted that with the aid of massage that assimilation is improved and cases accept and tolerate food in greater quantities than without this valued aid. Bodily weight is increased, new form is given to the anemic, emaciated, wasted patient, and life becomes worth while to these afflicted ones. Patience,

preseverance and judgment, under wholesome environment, are required to carry to successful issue this treatment by rest methods. The abuse comes in not appreciating the value of each factor; in leaving out one or the other; in lax methods of isolation; in absence of tact in securing the confidence of the patient; in the failure to appreciate the time required to accomplish results; in the absence of the proper environment and of the real and essential factor; an educated, tactful, resourceful, wholesome, genuine good nurse. Then, too, last but not least, the hopefulness which the physician can inspire; the patience he can cultivate and the tranquility he can inculcate are all useful factors in treatment.

Now as to the uses of rest treatment, the selection of cases and carrying out of details. First, and above all, it is to be remembered that if success is to follow that there are several things to be impressed upon the patient and her friends—of these, consent to absolute control of the patient during continuance of the treatment, and that she is to be removed from home, away from the environment, too frequently vicious, and that isolation to the point of seclusion is to be followed without a quibble from the parents or friends of the patient. I have learned this lesson by bitter experience, and it is the failure of this one important factor that all other adjuvants failed, partially or wholly. In young girls, neurotic, hysterical, with or without imagined pelvic, digestive, heart or other disorders, it is absolutely necessary that isolation be enforced. What is worth doing is worth doing well, and along this line let me quote you Clifford Allbutt. He says: "The three legs of the tripod are isolation, full feeding and massage, without all three legs the tripod can not stand." Yet, one patient is submitted to massage without isolation; or, to another massage is applied without rest, which is a condition of its use, for even a healthy person would find it hard to undergo daily massage and concurrently therewith to go about his ordinary work. . . Again, the feeding has to be calculated on a special scale, having regard, of course, to each case; this calculation calls for skill on the part of nurse and physician. . . No case of any severity can be cared for in the midst of the fuss and fidgets of the home."

My own experience is that in young women with indulgent parents, one or both of whom are neurotic themselves, overly anxious, overly indulgent and overly critical of physician and nurse, supply an atmosphere in which a most beautiful and chronic case of hysteria can flourish and a continuous neurasthenia, with its perennial story, go on to the limit. I know, and in this statement I am sustained by Mitchell, Playfair, Allbutt and other authorities, that in properly selected cases, a cure may be expected, especially in women, a cure that will remain a cure as long as proper mental and nervous hygiene is maintained. Allbutt especially dwells upon its efficacy in cerebro-spinal, cardiac and gastric forms in ill-nourished subjects and with comparative certainty and permanency of its results.

Again, another class which I believe is a growing class with the advance of abdominal surgery, and that is the post-operative neurasthenic class. It has fallen to my lot to see within the past few months six cases, all of whom have had abdominal section for one reason or another, and all of whom have developed neurasthenia or more pronounced mental disease. Surgeons should study the needs of their patients from this standpoint and enforce rest treatment to its fullest in the cases wherein neurasthenic symptoms are pronounced. I really believe that rest in such cases has as much to do with the brilliancy of recoveries in some cases as the operative interference.

The time spent in bed under appropriate environment and regulated hygiene has been a very potent influence in many cases of the surgical diseases of women. As my own experience accumulates, and I have treated over four hundred cases by rest treatment, I am more and more convinced of its value. To insure success, however, we must organize for it and be just as careful in our technique as is the surgeon in his modern organization and technique in his work. Each factor is to be considered and none left out, for it is the treatment as a whole which accomplishes results. The factors, then, are isolation, rest, massage, electricity, diet, an educated, tactful nurse, a hopeful, helpful, optimistic physician and a suitable, wholesome, restful environment.

VACCINATION FOR FILIPINOS.— $100,000 has been appropriated by the Philippine Commission for conducting vaccination throughout the islands.

NEW MEDICAL COLLEGE.—Pekin, China, has recently had formally opened the Union Medical College. The Protestant missions are responsible for its establishment.

MORE LEGISLATION.—A bill has been introduced in the New York legislature fobidding the marriage of insane, epileptic, imbecile or feeble-minded persons. It also makes it a felony for a healthy person to intermarry or live with such an individual.

ACUTE CATARRHAL DYSENTERY WITH A REPORT OF FORTY-SIX CASES TREATED DURING SUMMER OF 1905.

R. B. CHAMLEE, M. D.

N. BIRMINGHAM, ALA.

In discussing the subject of dysentery I will speak mainly of the acute catarrhal type, or in other words the disease the ordinary practitioner sees most often in temperate climates.

Dysentery affects most often the large bowels, usually the solitary nodules and generenteric mucous membranes, although the small intestine may be involved, and under the same heading different kinds of intestinal flux are described. The disease usually occurs sporadically or epidemically, and the exact cause is not yet clearly understood, it has occurred under conditions that favor the development of malarial fever, that is to say, hot summers with sudden changes in the temperature, accompanied by a great deal of rain fall; low marshy and poorly drained sections of country predispose to epidemics, although there is not a more widely distributed disease than dysentery. To quote Ayres: "Of dysentery it may be said that where man is found there will some of its forms appear."

Osler describes it as one of the four great epidemics of the world and in the tropics it kills more people than cholera, and has been more fatal, to armies, than powder and shot.

Etiology.—Bacteria play an important role in the causation of this disease. Booker's Study of the Summer Diarrheas of Children, is most convincing on this subject. No single varieties of micro-organism is found to be a specific exciter of the summer diarrheas, but the affection is generally considered to be the results of a number of bacteria, some of which belong to well known species and are of the ordinary varieties, and of wider distribution, the most important being the streptococcus and proctus vulgaris.

Symptoms.—Dysentery is usually ushered in without prodromal symptoms, however there may be slight colicky pains with some dyspepsia, free loose movements of the bowels of a diarrhea character, which diminish in amount and increase in frequency. There is usually no rise in temperature, the pulse may be slightly accelerated; the stools soon become very viscoid contain blood and mucus, and later pure blood accompanied by tenesmus.

The number of stools vary in frequency in the twenty-four hours. Except in very mild cases the patient suffers a great deal of pain, and the temperature may vary from 103 deg. to 105 deg. F. In severe cases the patient has loss of appetite, nausea and a coated tongue, whitish or gray in appearance, which later may become very red and glazed, especially if the case be a very severe one.

Headache, though not the rule, may be present. The patient complains of weakness, and in a great many cases complain only of the weakness and the frequent stools containing blood.

The abdomen is usually flat and hard and tenderness along the course of the colon, especially the ascending and transverse portion may be mapped out in some cases.

At times the patient will be bathed in a profuse perspiration, especially during defecation. Thirst is a feature in severe cases.

Diagnosis.—The diagnosis should not be difficult; the characteristic stools are pathognomonic of the disease. It is to be differentiated from local diseases of the rectum, such as epithelioma and syphilis, hemorrhoids and discharging intestinal abscess.

Prognosis.—The disease according to Flint, runs its course in about eight days, although in severe cases, may last from two to four weeks. It is hard to estimate the exact mortality, it ranges in different epidemics from 1 to 25 per cent. In armies, among soldiers, it has proven very fatal, also in the tropics it is very severe, but herein the temperate climate the mortality is very slight. In over sixty cases treated by me, in the summer of 1905, there was not a single fatal case.

I wish to mention briefly a few cases of the acute catarrhal type of dysentery which I have treated in Birmingham this year.

During the months of May and June I tabulated 46 cases of the above type, ranging from the mere presence of the mucoid and bloody stools with tenesmus, to the more severe cases, accompanied by high fever, frequent and bloody stools with great prostration, while in a few cases coma and mental disturbance occurred.

The following symptoms were present in most of my cases, viz., in the majority there was no chill, there was absence of fever, and a slightly accelerated pulse; a furred, moist tongue, sometimes red and glazed; then loss of appetite, slight nausea and frequent diarrhea stools. In about thirty-six hours the stools would contain blood and mucus in abundance; about the third day, pure blood and great tenesmus with severe colicky pain. The abdomen would be flat and hard, with

*Read before the Tri-State Medical Society, Chattanooga, Tenn., September 26, 1905.

some tenderness over the area of the colon. The average time of confinement in bed for each patient was nine days, although in several the stools were loose, occasionally contained blood for several weeks later.

The majority of the cases were abrupt in origin without any prodromal symptoms.

Treatment.—Flint has shown that sporadic dysentery in its mildest forms is a self-limited disease and runs its course uninfluenced in any great degree by drugs. This is owing to the great amount of surface involved by the disease, and the fact that necrosis and the ulceration following, are hard to control.

If a patient is seen only with loose bowels then the indications are that the bowels are not thoroughly clean; then we give a mild saline, or a dose of castor oil to empty the bowel. Of the internal medicines, ipecac justly holds the first place, especially in the tropics. It is best to give a hypodermic injection of morphine or tr. opium (by the mouth) about half an hour before giving the ipecac, which should be fully twenty grains or more; if this is rejected, repeat in a few hours.

Osler does not give satisfactory reports of the ipecac treatment. Bismuth in one-half drachm to a drachm doses, every two to four hours is beneficial. It must be noted that bismuth must be given in large doses and often repeated. It acts better in chronic rather than in acute cases. Morphine is the best agent for the relief of pain.

Opium suppositories are indicated in extreme irritability of the rectum, and to facilitate the use of an enema or high rectal injection. In order to give a rectal injection the patient is to be placed in dorsal position supported by pillow, and a long rectal tube inserted, then from one to four parts of water at temperature of 100 deg. is to be used, in which from 20 to 30 grains of nitrate of silver has been dissolved. A small per cent of the silver solution does but very little good. Alum, sulphate of zinc, acetate of lead, and salts of copper are also recommended by the authorities. Osler has found injection of quinine to be of great service in the amebic type.

Local applications to the abdomen of light poultices and turpentine stoops are of value in some cases.

The injection in the milder cases of laudanum one-half drachm to a pint of common starch water is found to act nicely.

The course of the disease is improved both in acute and chronic cases by careful regulation of the diet, which should be restricted to milk, whey and broths, and the stools should be watched for curds, and if any appear the milk is to be discontinued for a time.

In chronic cases the diet is of great importance, together with the local use of silver nitrate solution and large doses of bismuth, as already mentioned.

EARLY DIAGNOSIS OF TUBERCULOSIS.*

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KEOSAUQUA, IA.

TUBERCULOSIS, which is responsible for one-seventh of all deaths, is a subject which has interested the medical profession for generations. The laity, and no doubt many of the medical profession, are wearied of hearing of this subject, but it is one which indirectly, if not directly, interests us all, for there are few families indeed but what some among its members, are not affected by this disease.

So I have no apology for choosing such a subject. It is our duty as physicians to keep persistently warning the public against the danger of this trouble. In recent years the public, thanks to many open meetings to which the laity are invited, are becoming educated along this line, and it is rare indeed to find among intelligent people, those whom are not aware of its dangers and of the importance of an early diangosis. I mean a diagnosis made before the bacilli are found in the sputum. One who delays the diagnosis until the bacilli are found, are in my opinion guilty of gross carelessness and subject to censure by the patient.

Tuberculosis can be diagnosed before the microscope if of any value.

I do not wish to be understood as not an advocate and an unbeliever in the use of the microscope, but the point I wish to emphasize is, that tuberculosis can and should be made before the microscope is of value.

Speaking from a personal standpoint, if I suspected I was afflicted with the disease and my physician should delay his diagnosis until he was able to make it by the microscope alone, I should consider him incompetent and seek advice elsewhere.

It is well known that tuberculosis discovered early ere it has made very great progress, is a curable disease. The time is past when we inform our patient as soon as a diagnosis is made, that they are suffering from an incurable disease.

Some have claimed that 85% of all post

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mortems made, show some tuberculosis being present at some time in the individual's lifetime. Twenty-five or more percentage of cases found early are curable, hence it is our duty to diagnosis our cases early.

There is one thing I have found in my short experience and that is, it is difficult indeed, at times, to make the patient or friends believe they have the disease, and many times after informing them of the fact, they seek advice elsewhere.

But I believe they should be told the truth and so be enable to place themselves in the best possible condition to overcome the trouble.

How often patients will come, to us with a tubercular cough and inform us some physician has told them is a "bronchial trouble." A physician who would so inform his patient, knowing they had tuberculosis, is as much guilty of gross carelessness as one who fails to report a case of contagious disease.

1. Among the first symptoms which manifest themselves is loss of weight and impaired nutrition. A patient will complain of becoming wearied upon the least exertion and has a pronounced lessening of the power of endurance. This, many times, is what drives the patient to the physician for a "tonic" saying, "they are run down in health and tired all the time."

2. Cough.—It will be learned upon close questioning that there is a slight cough, so slight as to escape notice only upon the closest attention. This cough is a slight hacking and consists usually of a single effort. It may be elicited upon change of position and deep breathing. Many times a patient will deny having a cough, but even while making such denial will cough, not realizing they have done so. As the disease progresses the paroxysms become more and more frequent, and if hoarseness is present, there is little doubt of its being tubercular.

3. Gastric disturbances are of frequent occurrence. The appetite is slightly impaired and erratic. During febrile reaction, it fails, the tongue becomes coated, bowels constipated, there may be nausea and vomiting and these are sometimes called "bilious attacks."

4. Thoracic Tenderness.—Soreness and pain are rarely absent in early stages. The favorite location is in the upper part of the chest, though may be in any part of the chest, which of itself is suggestive.

5. Hemoptysis occurs in a moderate proportion of cases, but is very significant when present, and is of prime importance. This may be the first symptom which causes the patient to seek medical attention.

6. Pulse.—A quickened pulse is often present at the onset preceding the sputum test many weeks, or even months, and is suggestive, though less so than the evening temperature. Anders says, "A rapid, feeble pulse is one of the most unvarying features of early phthisis in the very young." The arterial tension is early and notably reduced. Frequent daily countings should be taken. The pulse of early phthisis will vary from 90 to 110, but it may be less or more. It is usually a high speed pulse, and should have considerable weight in the summing up of diagnostic points. The frequency, is but little changed by position.

7. Temperature.—Frequent and methodical observations are necessary to learn anything by the temperature. It should be recorded every two hours. A rise late in the afternoon rather than late in the evening is very suspicious. If the mean of the morning and evening temperature taken for twelve consecutive days exceed 99.5, the patient is either tubercular or strongly disposed to the disease. The rectal temperature is the more reliable. Tradeau says, "When there is any disturbance of general health, not accounted for otherwise, where the temperature rises above 99.5 in the afternoon, it almost always tubercular." Another says, "Fever starts one-third of the cases with the first local symptom." It may be present a long time before the sputum test gives positive results. On the other hand, MacKenzie claims, in cases where fair number of bacilli are present, the temperature for several weeks may be perfectly normal. An intermittent fever, resembling malaria sometimes, is present in early stages. An elevation due to other causes as anemia suppurative processes and the like may be eliminated by the blood examination. In tuberculosis in early stages there is a lessened number of the red blood corpuscles.

8. Physical signs variable in character are quite frequently met with and may precede the sputum test many weeks, or even months. They are found in the subapical space and usually posteriorly.

The percussion sound may be deadened. This test is unreliable.

Palpation.—Tactile fremitus may be increased but may be absent on account of a pleurisy. Defective expansion at or a little below the apex is profoundly significant, particularly in the infraclavicular space. This lagging is best appreciated by palpation.

Auscultation.—Among the earliest and most significant sign, is the diminution and almost total loss of the vesicular murmur, also prolongation and sharpening of the expiratory murmur is heard. At times an extremely delicate catarrh may be detected by the slight sense of moisture or stickiness, and

which may attain to the degree of a fine crepitation. It may be elicitated by causing the patient to cough, after which it may be hear at the end of the next deep inspiration.

9. X-Ray.—Radioscopic appearance are usually observed in subapical regions and they show sometimes the presence of consolidated areas before sputum test and physical signs. The value of the X-ray as a means of diagnosis is confined to those who are expert in the use of method.

10. Tuberculin.—The use of tuberculin is a much debated one. Some claim it is very reliable while others claim quite the reverse. Some object to its use, as it is liable to bring into action many cases of latent tuberculosis.

11. Heredity plays a most important part and is conceded by all to be a leading factor in making a diagnosis. The general opinion is that tuberculosis is not transmitted directly to the offspring but rather an impaired constitution which does not withstand disease and so becomes more liable to infection.

Environment history of attacks of pneumonia, influenza, measles and the like, as well as many other conditions should be borne in mind.

A patient, then, coming to us complaining of feeling tired upon exertion, appetite poor, digestive organs out of order, slight cough, and pain in chest possibly, a history of loss in weight, temperature elevated slightly, pulse quickened, pupils dilated, possibly a history of spitting of blood, we should be on the lookout for incipient tuberculosis, make our diagnosis as early as possible and place our patient in best condition to resist the disease.

Pneumonia with Meningitis.— W. H. Axtell, Bellingham, Wash. (Jour. A. M. A., March 3), reports a case of acute lobar pneumonia with pleurisy, running a typical course with crisis on the eighth day, but complicated with meningitis. This appeared first on the third day with severe frontal headache and some stiffness of the nuchal muscles and violent delirium, highest at the crisis of the disease.. All the symptoms, however, disappeared under simple supporting treatment with ice caps to the head and cool sponging to reduce temperature. The patient was discharged fully convalescent on the twenty-first day; there have been no later mental symptoms. The special points of interest noted in the case are the absence of any cardiac symptoms and typical course of the lung disorder which was unaffected by the meningitis.

PAIN.

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We all know what pain is, but to give a satisfactory definition of it has taxed the brains of lexicographers and encyclopedists. Some one has said it is an "excess of the sense of touch;" another, "hyperesthesia of the sensory fibres." Dunglison, in his medical dictionary, says it is a disagreeable sensation which scarcely admits of definition. Dorland defines pain as "distress or suffering." Foster's Encyclopedic Medical Dictionary says "local sensation of distress due to injury or disease." The Reference Handbook of the Medical Sciences says, "From a restricted philosophical view, pain may be regarded as a reaction of the organism, in part or as a whole, to harmful influences; giving a warning in consciousness that some activity prejudicial to the health of the tissues is operative."

When we consider that nine-tenths or more of the patients we see are first apprised of a departure from their normal condition, and induced to seek relief, by reason of pain in some part of the body, then, we must take into consideration the diagnostic significance of pain, and the great value of that particular symptom, in estimating the morbid condition, and the intelligent application of therapeutic measures.

Pain is nature's method of sounding the alarm. A differential diagnosis is often possible in obscure pathological conditions by a careful study of the nature and amount of pain complained of, and hence it behooves us to be careful not to obtund by opiates or other means this important symptom—this signboard-pointing us unerringly to a correct solution of a diseased condition.

"Pain (1) being purely a subjective symptom, its intensity must be estimated by the statements of the sufferer, by the manifestations of its presence, and by the nature of any lesion which may be discovered as its probable cause. The variations in pain sensibility are very great, and are racial as well as individual. The most important variations, however, are personal or individual. The congenitally neurotic patient will complain bitterly of pain from a cause which in one of dull sensibility will give rise to slight discomfort."

The manner of life and occupation may modify the susceptibility to pain. The habitual endurance of hardship blunts the pain sense, and, conversely, the person guarded

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*Read before McCracken County Medical Society, Paducah, Ky., January 24th, 1906.

from rude mental or physical contact, will be more acutely sensitive to pain. . . The sensibility to pain is apt to be increased by its long continuance, and it is a common observation that each recurrence of pain, during the course of disease finds the patient less able to bear it."

"There are also differences in the manner of statement. Some patients as a matter of pride, practice understatement of their subjective sensations, while others from various motives habitually magnify their sufferings, and in most instances without the slightest intention of deceiving the physician. It arises largely from the unconscious egotism of illness and a desire to obtain relief by impressing the medical attendant with its pressing necessity. In estimating the severity of pain, the facial expression and bodily manifestations of pain are of much value. A statement made with a cheerful countenance, that the speaker is, at the present moment suffering "horrible agony" does not square with the facts, and this combination is of diagnostic value as indicative of self-deception, hysteria or a habit of chronic emphasis." . . "In the majority of cases in which really severe pain is present the respiration is rapid, the pupils are dilated, the skin is wet with perspiration, the pulse is apt to be tense, there is a feel of faintness, and not infrequently a large amount of limpid urine is passed within a brief period—symptoms, some of which cannot be simulated.

The character of pain is of diagnostic importance. For instance, a tenesmic pain accompanied with a straining or bearing down effort, we find in a colitis, proctitis, cystitis or urethritis; in the neuralgias and colics we have a paroxysmal or remitting pain.

The excruciating, persistent, dominant pain in head and back of neck, with fixation, retraction of the head, fever and tenderness along the spine is characteristic of cerebro-spinal meningitis.

The acute, sharp, "stitch" in the side, intensified by inspiration as well as by voluntary motion of the affected side, accompanied by fever, and dry, distressing cough, which is restrained as much as possible, hurried, jerky, painful respiration, gives the clinical picture found in pleuritis and pleuro-pneumonia.

The intense, constant pains in the joints, aggravated by the slightest movement or even shaking of the patient, accompanied by fever and swelling of the parts, is characteristic of acute articular rheumatism.

In diseases of the abdominal and pelvic organs we have the greatest variety and character of pains. In toxic gastritis the patient experiences pain in pharynx, along the sternum, and in epigastric region of a violent and burning character.

"The most prominent symptom of gastric ulcer is pain.(2) The pain of ulcer has several important characteristics: it appears in paroxysms, it is strictly localized, it occurs at the time of digestion and is influenced by the character of food. The location of the paroxysmal pain usually corresponds to the place that is most sensitive to pressure. . . Simple ulcer of the stomach produces pain only when the organ is irritated, and the most common irritation is the food. When the stomach is empty and is not irritated in any way, the ulcer is rarely painful."

"The immediate(3) symptoms of acute perforation in gastric ulcer, are first, sudden, agonizing, overwhelming pain in the region of the stomach, sometimes tearing in character often with the sensation of something having given away. The pain is frequently so in tolerable that the patient falls to the ground and he may become unconscious."

"In appendicitis pain is the chief symptom.(4) McBurney's description is as follows: In every case of appendicitis the seat of greatest pain, determined by the pressure of one finger, has been very exactly between an inch and a half and two inches from the anterior-superior spinous process of the ilium in a straight line drawn from that process to the umbilicus. He considers that tenderness there in the early stages of an attack, is evidence of appendicitis and occurs in no other acute disease.

LITERATURE.

(1) Diagnostics of Internal Medicine, Butler, page 35.
(2) Diseases of Stomach, Nothnagel, page 578.
(3) Annual Oration in Surgery, Frank, Kentucky Medical Journal.
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STOMACH DRAINAGE IN LONG CONTINUED INDIGESTION.

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THE last few years has seen wonderful advancement made in medical science, especially in placing diseases in their correct realm. Taking from surgery and placing them with the internal medicine men, the things that rightfully belong to them, and taking from internal medicine those things that rightfully belong to the surgeon. The organ which is lately demanding the most

*Read before the second annual meeting of the physicians of the first councillor district of Iowa at Fairfield, Ia., January 26, 1906.

attention is the stomach. I agree that things are hardly settled now, but with men like Mayo, Sheldon and others at work, it is only a matter of time. The drop of experience I may hope to add is the only valid excuse for a paper that must necessarily be as incomplete as this one.

Into every office comes those cases giving history of long continued stomach trouble. They have a history extending back over fifteen or twenty years. They have been to almost every doctor in the county, and no benefit. They have taken every conceivable form of patent medicine, and no betterment. They are back to us again with the plea that we do somthing to relieve them. If we take time with them, and we should take time, we will find a condition as follows: They are complaining of pain in region of stomach: they are markedly constipated, and always neurasthenic: they are showing signs of secondary anemia: they have an atonic condition of the muscular wall of the stomach, and a more or less dilated gastric pouch, and an accompanying gastritis more or less acute. Such cases as above, are beyond the help of medicine, but can be relieved by surgical interference completely and permanently. The question of permanency that arose with my first case, is only partially answered in the affirmative

My limited experience hardly warrants a positive statement as to all cases, but to some of those sufferers I am convinced you can offer a cure. We will all admit the fact that overwork of the gastric muscles will produce atony with an elongation of muscular fibers. If this condition exists for some time, we will have an enlarged stomach cavity, a dilatation.

In these cases your examination of stomach shows the chemistry of that organ to be normal, so far as the digestants are concerned. The trouble, as expressed by Mayo, is that the mechanics of the stomach, and not its chemics are at fault. Hence in these cases, the administration of any or all the therapeutic agents are of no value, and the case must be relegated into surgery. Do not understand that this condition can exist an indefinite time without showing some secretory disturbance, but when they exist, they are usually secondary.

If you can countenance this statement, that the primary trouble is motor, as the result of atony, then the symptoms follow is this sequence: We have an atony of gastric muscles, as a result of overwork: the stomach loses its power to force contents through pylorus; to empty the stomach: the accumulation of substances in stomach farther stretches or dilates the stomach, and drainage becomes more imperfect.

The food undergoes fermentative changes, just as urine does in a faulty bladder, and the same irritation takes place in mucous membrane of the stomach, as in the bladder. This fermentative material in stomach produces a gastritis; hence the constant complaint of pain. There is an inflammatory thickening, and the pylorus is narrowed, and this vicious cycle is begun. With a condition of fermentation going on within the stomach, and this partially digested vitiated material leaking into the bowels, it is not to be wondered at that we have marked constipation as a symptom.

The anemia, which is a secondary symptom, showing itself frequently enough to be considered, is the result of improperly prepared food. Assimilation of contents of stomach and bowels is practically impossible, and the impoverishing of blood must be the result. Pearce, Myers, Ranney, Bouchard will agree that neurasthenia is traceable to poisons, toxemia, to autoinfection and anemia. The stomach forms a beautiful machine for the generation of toxins, and so does an overloaded bowel. Besides being a perfect incubator, offers the most elaborate mechanism for the absorption of its product. Vomiting may, or may not be a constant symptom, but eruption of sour fluids and gases is usual, with occasional attack of vomiting. The above are prominent symptoms that indicate surgical interference. All of the symptoms are relieved by gastro-enterostomy.

I will cite three cases, as they serve to bring more strongly the symptoms into prominence:

Case I.—N. Colvin, Wyaconda, Mo.; farmer, aged 53, came to my office in November, 1904, complaining of stomach trouble extending over a period of some twenty years. Early in history vomited considerable blood, which had ceased some years previous, an almost constant pain in epigastrium, with periodic attacks of vomiting lasting from a few days to weeks, when they would suddenly cease, only to start again in a few weeks or months. He also complained of marked constipation. He was emaciated, and of that dirty bronze color so significant of malignant involvement. He was anemic. He was markedly neurasthenic. The stomach examination was negative as to closure of pylorus. Free hydrochloric acid found in three of four examinations. Organic acids normal. Blood count showed secondary anemia. Stomach inflated with air showed some dilatation. He had taken all the chemical and animal diges-

tants singly and combined, with no effect. We used stomach tube, and taught patient its use. Relieved some of pain, and the washings got away with large amounts of glairy mucus with no permanent results. The starvation plan tried. Kept everything off stomach, and fed per rectum for two weeks. No results. I then proposed to make a junction between stomach and loop of bowel and see what drainage would do for him. He accepted, and in January it made a union between the posterior wall of stomach and jejunum. I operated by means of the Murphy button. Fed by rectum first six days. For first three days gave nothing by the mouth, after that time allowed a little water and some milk. Patient made a very rapid recovery, passing button on thirteenth day, and leaving hospital one week later. At the time of operation, I found stomach dilated, and walls somewhat thinned. A slight thickening at pylorus, but no occlusion, only a little narrowing. A careful search failed to reveal any scars form an old ulcer. The man has been free for over a year of any symptoms of old trouble. He has gained and held his weight, and a letter a few weeks ago states that he can eat anything and feel good afterwards.

Case II.—H. Rodgers, operator of lineotype, age 28. Came to office at time No. 1 was under treatment, complaining of indigestion; the beginning of trouble dated back eight years, first year's work on machine. He attributed his trouble to antimony used in the type metal. He had the pain in epigastrium; he never vomited, but at different times during the day rifted up a mouth full of sour fluid. He was anemic, constipated and neurasthenic. Examination showed under air distension the stomach dilated. Test meal given showed motor power of stomach lacking. Free hydrochloric acid present. Diagnosis was an atonic condition, with at least partial retention of the food. Operation proposed, and consent withheld, pending results of case No. 1. Operated January 20, made a posterior-gastro-jejunostomy without loops, after Mayo's method. Used button. Button passed at end of third week, and patient was back on full diet by the fifth week. From second day allowed light soups and milk by mouth, supplemented by rectal feeding. There was no loss of flesh while in bed. At present man is well, weighs 147 pounds, as against 115 before operation. Pain gone, constipation relieved and neurosis entirely absent. He works and eats as well as ever in his life.

Case III.—W. Kimbrough, Carthage, Ill., aged 35. Symptoms of stomach disturbance extending over eighteen years. He gave th usual details of his stomach trouble. He had pain at pit of stomach. He did not vomit but was frequently belching sour fluids and gases. His bowels never emptied themselves except under whip of large quantities of salts and the enema. He was always worse during the winter; was for a number of years fairly comfortable during the summer, but the last two years saw little difference between the seasons. He was pale, cadaverous and anemic; showed that weird collections of nervous symptoms known as neurasthenia. The examination showed some dilatation, and by giving patient a sharp shake, you could get that diagnostic splash. Chemical examination showed free acid constantly present, but in small amounts; fermentative material abundant. Removal of test meal three hours after eating found stomach practically full. Under air and water stomach was found dilated. Operated November 17. Stomach thin, mucous membrane highly injected and some narrowing at pylorus. I used the Monprofit method of operation. I had no regurgitation in the two previous cases, but felt I might expect it. So as patient was in good condition, I made the double anastomosis, as a safeguard. All symptoms subsided almost immediately upon operation. The man was in hospital about five weeks. One button was passed four weeks after the operation. The other one is still within the patient; it is causing no symptoms. It may have fallen back into the stomach. It is a possibility we may expect in using the Murphy button. It is not the technic of operation, but the cause, I have here under consideration.

I appreciate that from three cases hardly any conclusions can be drawn that are positive. But to the three cited here we can add Sheldon's and Pond's case, and the results are worthy of consideration.

That certain cases of chronic dyspepsia are not amendable to internal medicine, but can be cured by gastro-enterostomy is certain. The choice of operation the choice of the doctor in charge.

I leave the paper with you, in hopes that you may find something of interest and help in caring for at least some of your chronic dyspeptics.

Adulterated Communion Wine.—The Health Commission of New York City had some "communion wine" analyzed and found wood alcohol, hard cider and anilin dyes to be the chief ingredients.

Sanitary Cars.—The Ohio State Health Board now requires all companies operating steam or electric cars, not entirely confined to one municipality, to provide cuspidors for the travelling public.

THE MEDICAL FORTNIGHTLY

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EDITORIAL

The Physiopathological Problem of Responsibility.

THE question of responsibility in mental disease has ever been a difficult problem, both for the physician and the lawyer to solve. The old traditions founded upon the time-worn precedents of the law where the right and wrong test seems all sufficient for the jurists, has not been found sufficient from a purely medico-psychological standpoint.

Of late there is renewed interest in these perplexing problems, and along this line a scholarly contribution by J. Grasset (Journal de Psychologie, Normale et Pathologique; Journal Nervous and Mental Disease, Vol. 33, No. 2, p. 135) on "The Physiopathological Problems of Responsibility," in which the author says there is much confusion among medical witnesses regarding the degree of responsibility and in seeking an explanation he says, "There is a superior (conscious) and an inferior (subconscious) mind. The medical witness should, at first, seek to carefully separate the philosophical question of responsibility from the medical or psychophysiological question. He should limit himself strictly to the latter. Can he do so? Yes, for it will be conceded by court and expert alike that abnormal mentalization must be dependent upon abnormal antomo-physiological conditions, and a discussion of these conditions is the medical expert's particular province. The disease of legal responsibility that is to be associated with these abnormal states of mentalization, borne witness to by the medical experts, is a question solely for the court to decide. Medical responsibility is, or may be, something quite different from legal responsibility, hence the confusion surrounding this question when it is under discussion in a criminal court.

Grasset then further discusses medical responsibility, and shows that there are three sets of mental diseases, as it were, in each of which the responsibility is quite different. In the first place, he distinguishes clearly those affections of the superior mind (mental diseases) from those of the inferior mind (psychic diseases). Herein he shows that the terms psychic and mental are not synonymous. Psychic is synonymous with cortical and is therefore far more general in its significance than is mental, which in signification, is rather more limited and refers functionally only to the prefontal lobe.

Irresponsibility accompanies the diseases of the superior mind, the true mental diseases; responsibility or partial responsibility accompanies always the diseases of the inferior mind, the mere psychoses. Mania is an illustration of the former, hysteria of the latter. Psychic maladies that complicate mental affections must also presuppose irresponsibility. The mentalization will of course be abnormal in both mental and psychic diseases as well as in their mutual complications. The medical expert may consistently testify to this fact and indicate, as shown above, how responsibility, from the medical point of view, may accompany one set of diseases, attenuated responsibility another set, and complete irresponsibility still another set. It is not for him to assert, in his capacity as medical expert, how philosophy or law is to regard the degree of responsibility in there respective conditions."

This is a decided step for advancement in medico-legal science, which physicians will do well to observe and follow in practice. To successfully draw the lines of difference in degree; in other words, to fit the responsibility to the individual not the crime will necessitate a training in mental disease both clinical and pathological greater than is given to the average physician Again, a broad philosophical knowledge of the characteristics of man must be an accomplishment of the would be medical expert, in order that he may with cultured ability recognize, discriminate and differentiate degree of responsibility.

F. P. N.

CHANGE IN DATE OF BOARD MEETING.—The State Board of Health of Missouri has postponed its meeting in Kansas City to April 16, 17, 18. An examination of applicants will be held at the Barnes Medical College, St. Louis, on April 10, 11, 12.

THE REVIEWER'S TABLE

Books, Reprints, and Instruments for this department, should be sent to the Editors, St. Louis.

A MANUAL OF MATERIA MEDICA AND PHARMACOLOGY, COMPRISING ALL ORGANIC AND INORGANIC DRUGS WHICH ARE TO HAVE BEEN OFFICIAL IN THE U. S. PHARMACOPOEA. Together with Important Allied Species and Useful Synthetics, Especially Designed for Students of Pharmacy and Medicine, as well as for Druggists, Pharmacists and Physicians. By David R. M. Culberth, Ph.G., M.D., Prof. of Botany, Materia Medica and Pharmacology in the University of Maryland, Dental, Medical and Pharmaceutical Schools. Fourth edition, engraved and thoroughly revised, with 487 illustrations. Philadelphia and New York: Lea Brothers & Co., 1906.

The fourth edition of this book contains the changes of the last U. S. Pharmacopoia, and every subject has either been rewritten or decidedly modified. The numerous excellent illustrations of plants, animals, etc., affords the reader a good opportunity to become more familiar with them. The synonyms are given in the Latin, American, British, French and German language, thereby enhancing its value as a reference book particularly to the druggist or other reader who may be familiar with the substance in one language but not in another. The methods of manufacturing the various pharmaceutical preparations is also given in a clear and concise way. The microscope and its use in materia medica forms part VI, giving the reader the essentials of this subject. This book will be found a valuable addition to any one's library who may be interested in the subjects with which it deals.

VON BERGMANN MADE SENATOR.—The noted surgeon, von Bergmann, was recently appointed by the Kaiser member of the upper house for life.

DISINFECTION IN TORONTO.—Hereafter all houses in which tuberculous patients have died, in the city of Toronto, will be disinfected by the local health officer.

NEW RULING.—The Iowa State Board of Medical Examiners has made a ruling that after July of this year no diplomas will be recognized that are ganted by schools giving advanced standings for work done outside of medical schools. Minnesota has had such a rule for some months past.

"THE JEWS IN ROUMANIA" is the subject of a paper by Carmen Sylva (the Queen of Roumania) in the March Century. The Queen pleads that Roumania is not inhospitable, but so absolutely poverty-stricken that the soil cannot support foreigners; and she begs at least a hearing for the people of her "sorely afflicted country" before they are censured for considering first their own children and their necessities.

REPORTS ON PROGRESS

Comprising the Regular Contributions of the Fortnightly Department Staff.

DISEASES OF THE NERVOUS SYSTEM.

FRANK P. NORBURY, A. M., M. D.

The Treatment of Cerebro-Spinal Meningitis.—(O. T. Osborne, M. A., M.D., N. Y. Med. Jour., Feb. 17, 1906.)—A rather optimistic paper, in which the author advocates "ice, ergot and morphine" as "the treatment that will save and has saved many patients from this disease." His treatment in brief is as follows: "The almost constantly beginning sore throat is treated with antiseptic, with antiseptic gargles and sprays. Conjunctivitis should be treated by sample boric acid drops. A calomel purge in the beginning. Painful joints are to be treated by being wrapped with cotton and kept warm. Pain in general by the use of morphine by mouth or hypodermically, and in sufficient doses to give relief. Food should be light, and when nausea and vomiting occur withdrawn until these symptoms subside. Nausea and severe vomiting may be relieved by injection of morphine. To quiet cerebral excitement and delirium and also pain, and to diminish the necessity for large doses of morphine, ergot is recommended. It contracts the blood vessels, is of value in cardiac weakness with soft pulse and dilated arteries, and is a decided sedative to the central nervous system, as it seems to relieve congestion in the cerebral and spinal vessels. A patient who does not sleep well with a large dose of morphine will be found to sleep well after a dose of ergot has been added. Immediate and best action of ergot is secured by hypodermic injection and preferable in the region of the deltoid muscle; the frequency of injections depending on the symptoms. An indication that too much ergot is being used is a high tension pulse and a too greatly slowed heart. Ice.—The ice cap to the head and the spinal ice bag are necessary. The ice applications are more or less constant, depending on positive discomfort of the patient, and subnormal temperature. If the temperature is subnormal or the surface of the body is cold, hot applications are certainly of advantage. The general care of the patient should be the same as in typhoid fever—a light, airy room—the patient quiet, no talking, except such as is necessary. The bowels must move daily. The diet should be nutritious after the first few days. Avoid alcoholics, avoid strychnine and quinine. Massage and electricity during convalescence.

Exophthalmic Goitre and Its Treatment.—Geo. R. Murray (British Medical Journal, Nov. 11, 1905, the Bradshaw lecture.) In a very complete lecture Murray, who by the way is one of the foremost workers in this field of medicine, suggests the systematic application of the faradic current after the manner proposed by Sir Victor Horsley, as the most satisfactory treatment. Two flexible electrodes, 2x4 inches, covered with flannel or wash leather are moistened with a warm salt solution, and one is applied over the goitre in front and other at the back of the neck. The electrodes may be held in position by straps. The secondary circuit of a dry cell battery is used and a water rheostat used to control the current, which should be strong enough to produce a prickling sensation to the skin. The treatments should be for one hour twice a day, and in some cases three or four hours in a day. The patient can learn to apply the current and should recognize the importance of continuous day after day treatment. Steady improvement and recovery has resulted in many cases treated in this manner. The drug treatment is advisable, but the limitations of drug treatment are recognized. Arsenic is the most useful for daily routine treatment. A useful method is to order four or five minims of the liquor arsenicalis, three times a day, excepting one week each month or during the menstrual period. This should be continued from six to twelve months. To reduce the pulse rate the tincture of convallaria from ten to fifteen minims with the arsenic. If extreme nervousness is in evidence, then the bromide of potassium in ten grain doses, may be added. Belladonna is useful in cases presenting excessive perspiration, but not for prolonged treatment. Iodide of potassium is unsuitable and only in many cases aggravates the condition. Thyroid extract also is not desirable as it aggravates the condition. Suprarenal and thymus tablets have been of service in some cases. The red iodide of mercury applied locally has also been of service in some cases. For the special symptoms special measures are needed, thus in diarrhea, rest, liquid diet and a mixture containing laudanum and dilute sulphuric acid will be of service. Persistent vomiting, frequently uncontrollable and may produce death, is best relieved by hypodermic injection of morphine. The serum treatment is slowly meeting with favorable results, especially in the cases presenting acute mental symptoms, Schultes reported such a case. Thyroidectin, Moebeus's serum, etc., have not been used sufficiently to report their full therapeutic value. The risks of surgical treatment are unfortunately so great that Murray hesitates to recommend it. He concludes this very excellent lecture by saying, "We must on the whole conclude that at the present time in the great majority of cases the best results are obtained by general hygienic treatment combined with the use of electricity and certain drugs, and that as yet no serum or other animal product can be considered to give better results than these older methods of treatment."

The Underlying Principles of Treatment of Epilepsy.—W. P. Spratling, M.D. (Annual Report of Craig Colony, 1905, p. 3.) The first essential in the treatment of epilepsy is the treatment of the individual. To ignore the person and treat only the symptoms is not a cause that invites best results. At Sonyea (Craig Colony) the first efforts are devoted to the individual in toto. By doing this it is possible to overcome seemingly fundamental defects that on exclusive method of combating could even rectify, and while this is the first factor it is far from being all of it. No claim is laid to originality in its use, except to apply it in the treatment of epilepsy. The same course has been used in treatment of pulmonary tuberculosis. When epilepsy is as rationally treated as is tuberculosis the percentage of cures in epilepsy will be as high as they are in insanity, 25% to 30% or more. No argument is made for the similarity of tuberculosis and epilepsy; the two diseases are widely dissimilar in every respect. The only argument is that the epileptic is a victim of a deep-seated condition, the eradication of which cannot be accomplished by a single narrow line of treatment.

The Nervous Manifestations of Rheumatism.—Poynton and Paine (London Lancet, Dec. 16, 1905) first discuss the etiology of rheumatism, saying it is a definite infectious diseases, due to the diplococcus rheumaticus. In support of this view they explain the coincidence of this bacterium as found associated with arthritis, endocarditis, pericarditis, subcutaneous, nodules, pleurisy, pneumonia, peritonitis and nephritis, and that they are able to produce similar lesions in animals. They summarize in the clinical part of the paper, as follows, realizing their belief that rheumatic chorea is a local infection of the nervous system, and that most of its symptoms are the result of a slight meningio-encephalitis and possibly meningo-myelitis, viz: 1. They have isolated and cultivated the diplococcus from the cerebro-spinal fluid in four cases of fatal rheumatism, in three of which there was chorea at the time of death. 2. They have produced twitching movements, arthritis, endocarditis and pericarditis by intravenous injections of the diplococcus

into rabbits. 3. They have demonstrated the presence of diplococcus three times in the cerebral pia mater, and once in the brain from cases of chorea. 4. Also in the brain and pia mater of the rabbit that has shown twitching movements. In the third section of their paper they discuss rheumatic meningitis, basing this upon a case fully reported in which was found a meningitis, basic in distribution and spinal meningitis general in type. Minute diplococci were found in pus from the cerebro-spinal fluid and cultures, yielded a pure growth of the diplococcus. Two rabbits were inoculated and died in twenty-four hours. The diplococcus was isolated from the blood, injected into a rabbit and was followed by arthritis. The diplococcus was found in the affected joints. The authors believe this to be diplococcus rheumaticus. The authors place rheumatic meningitis midway between the slight rheumatic lesions which exist in chorea and acute fatal rheumatic hyperpyrexia, which they regard as an acute rheumatic toxemia.

The Value of the Bromids in Epilepsy.—One of the better methods of treatment of epilepsy of late years is the reduction of the amounts of bromids given. The use of this drug is well nigh universal; a household remedy; hence its abuse. Many epileptics respond well to the suppressive efforts of bromid, but suppression is not cure. The bromids have a limited value in holding epileptic attacks in abeyance, while other forms of treatment aim at the removal of the cause have a chance for action. Not more than one-half the cases treated at Craig Colony are given bromid in any form. Its unlimited use is disastrous. The dose as generally given is too large. It is seldom necessary to give over 12, 15 or 20 grains three times a day as a routine treatment for any length of time, while 8 to 10 grains is sufficient under guarded administration. Emergency doses to check "serial attacks" or "status epilepticus" may be much larger.

OTOLOGY.

ALBERT F. KOETTER, M. D.

Bilateral Suppurative Otitis Media, Due to Scarlet Fever, with Mastoiditis and Rupture into the Corticalis, Complete Deafness, Recovery and Restoration of Hearing without Operation.—Suné Molist, Barcelona Académie of Medicine.)—Girl of twelve, eight days after inception of scarlet fever, was taken with severe earache and discharge from both ears, complete deafness. After ten days region of mastoid painful, red and edematous, fluctuation. Whereas from some sources operation was advised, author decided to wait simply making an incision back of the ear. The wound healed nicely. On the twentieth day, the watch, which had not been heard either through the air or bone conduction was heard 1 cm. distance, six days later 10 cm. Discharge continuous. Two months later, after treatment with natrium sulphophenolicum, recovery, both perforations closed. Watch heard 60 cm., whispered voice 2 meters. After one year complete recovery, hearing normal. Based on the result of this case author considers it advisable to operate on children, only under the following conditions: 1. When the pain over mastoid process is very severe and does not yield to treatment. 2. When the retro-auricular abscess is not very painful. 3. When after opening the abscess a bone fistula is found. 4. When the bone fistula is not closed after one month's local treatment. 5. When cerebral symptoms appear. Complete deafness appearing early in the disease may not necessarily be permanent in children. Perforation in lower half of membrane indicates chain of ossicles intact, consequently after healing of perforation hearing will again be normal. When perforation is found in upper half, the exudate in the attic usually leads to ankylosis, synechia, etc., with consequet deafness. The favorable result of the case reported is no doubt due to the good drainage favored by the location of the perforation.

On the Early Diagnosis and Operation of Empyema of the Mastoid Process in Acute Suppurative Otitis Media.—(Arthur of Forselles, Helsingfors, 1905)—Author describes in detail the progress made in indications for opening the mastoid, since Schwartz's first dissertation on this subject, and reports thirty-five cases operated on, with his observations and opinion as to the indications for opening the mastoid. Besides the usual symptoms, swelling, fever, etc., finds in the consistency of the pus a very important adjuvant for the location of the pus, whilst the sticky, cell impoverished pus is usually found in the tympanic cavity the thick, creamy pus rich in cells is found in the antrum and mastoid cells. According to the experience of the author the consistency of the pus is determined by measuring the specific gravity according to Hammerschlag's method: One drop of pus is added to a mixture of chloroform and benzine having a specific gravity of 1020, and then chloroform or benzine added until the drop of pus floats in the solution, then determine specific gravity of fluid by areometer, this will also be specific gravity of pus. In these examinations the

specific gravity of the pus is much higher in mastoiditis than otherwise, fourteen cases (adults) were examined and in all cases the specific gravity was 1045, shortly before the operation, whereas the specific gravity in uncomplicated cases 1044. Author believes that cases with specific gravity of 1045 are suspicious of empyema and when 1046-1047 the diagnosis is certain and operation indicated. In five cases where no symptoms of empyema were present, after this indication, namely, high specific gravity, operation was performed and justified. In children the condition is different, two operative cases and several uncomplicated point to the fact that the specific gravity in children is lower. On the other hand, we must not forget that the presence of blood increases the specific gravity of the exudate. Author does not mention the fact that cases occur in which the empyema of the mastoid process, may become incapsulated so that no connection exists with the tympanic cavity, in these cases we would not be able to observe an increase in the specific cavity.

Collection of Illustrative Cases Contributing to the Question of Deafness and Deaf-mutism as a Result of Syphilis Hereditaria Tarda.—Hopmann (Zeitschrift fuer Ohrenheilkunde) reports seven cases in which the patient besides other hereditary syphilitic stigmata, retarded development, deformities of the skull and nose, scars of the skin and mucous membranes, articular inflammation, Hutchinson's teeth, parenchymatous keratitis, a disturbance of the hearing was recognized, this is one of the Hutchinson trio of symptoms. As with other observers, so with him the female preponderates in proportion of five to two. The deafness usually appeared in the first or in the first half of the second decennium, the eyes usually being involved before his time. It is characterized as a nervous deafness, with bone conduction entirely gone to greatly reduced, appears suddenly and always bilateral. Vertigo and tinnitis often accompany this trouble. Pathologic-anatomical conclusions are missing. Therapeutically the energetic mercury treatment should be instituted. The complete schmier cure should not only be used once, but is to be repeated several times in the course of two to three years.

The Dangers and Difficulties of Operations on the Mastoid Process, the Variations in the After Treatment and the Ultimate Result.—(C. A. Ballance, The Lancet.)—Dangers.—Insufficient anatomical knowledge, use of impractical instruments, insufficient illumination of the field of operation, infection due to faulty asepsis need not be specially mentioned in surgical interference. Exposure of dura mater in the middle and posterior cranial fossa which cannot always be avoided in cases where there is a descent of the cranial fossa respectively, the protrusion of the sinus, is without danger, especially injury to the dura. Injury to the facial nerve and external semicircular canal can be avoided if caution is exercised, the latter is more often injured than the former by the beginner, and may lead to labyrinth infection. Sometimes injury to the facial cannot be avoided, namely, where infectious process extends inward from the nerve. Variations in the after-treatment: Temporary paresis of the facial, as it sometimes occurs two or three days after the operation usually heals in a few weeks. Delay in healing or continuance of the suppuration are usually due to insufficient removal of diseased surface or mistakes in the plastic operation. Optic neuritis often exists for months. Symptoms of disease of the inner ear or the brain as they occur in extensive inflammation of petrous portion of the temporal bone disappear after operation, but not in those cases in which these parts are actully involved. Final result: In careful execution of the radical operation permanent recovery occurs unless we have to do with malignant tumor or tuberculosis, but even then complete recovery takes place in the latter cases, and in the former we have at least considerable relief, recurrence in about 10%, usually at the tegmen, marasmus in children, may cause marantic thrombus of the longitudinal sinus, after operation. The restoration of the hearing is of secondary consideration and depends on the condition of the parts surrounding the windows. The prognosis is better in acute cases, and also when the disease is limited to the mastoid process. Choice of cases for operation: all chronic suppurative cases should be treated by the radical operation. In a case which was operated after six weeks suppuration the radical operation is safer than if done during acute stage.

SURGERY.

JOHN McHALE DEAN, M. D.

Three Years Experience with Pyloroplasty.—Finney in an article in Journal of Surgery, Gynecology and Obstetrics gives briefly an account of his experience with his pyloroplosty operation in benign stenosis of the pylorus. He reports a series of thirty-three cases operated on with three deaths. The deaths were not due to the operation per se. He claims pyloroplasty offers more advantages than gastroenterostomy in benign

cases. Mayo has had bile regurgitation after one of his pyloroplasty, but the author has no such experience. The popular opinion is that in dense cicatrical ulcerations it is difficult to perform is strongly denied by the author, who claims that such cases are not only more easily remedied in this way, but that the repair of the ulcer itself promptly follows. The author believes the interrupted suture more expedient in its performance than the continuous.

Foreign Bodies in the Esophagus.—In Journal of Surgery, Gynecology and Obstetrics, Stuart McGuire reports two cases of foreign bodies in the esophagus removed by him at Richmond hospital. The one lodged in the esophagus opposite the cricard cartilage proved to be a glass stopper. Esophagotomy was performed and the foreign body removed. In the other case an open safety pin with a sharp point directed upward was lodged in the esophagus just opposite the heart. In this case the author performed gastrotomy and with esophageal bougie pushed the pin in reach of his finger through the cardiac orifice of the stomach. Both patients recovered promptly. The author advises in all cases of foreign body low in the esophagus it is best prior to operating to force or push the foreign body into the stomach on account of the danger of undue manipulation to the heart actions during anesthesia. Diagnosis of foreign bodies in the esophagus is easily made from history in ability to swallow or painful deglutition together with the employment of the X-ray.

Effects of Osmic Acid Injections.—In Jour. A. M. A. Eastman reviews the literature of osimc acid injections in nerve trunks for the relief of neuralgia. He appends eleven cases of his own in which the treatment was adopted. The author injects ten drops of a 2 per cent solution of osmic acid in the nerve trunk after the trunk has been exposed by incision. He claims much benefit from this procedure in neuralgias and in some cases permanent cure has resulted. In some cases the acid was injected subcutaneously, but with not as much success as in the open operation. Some cases received injections in the terminal branches with good results. The conclusions of the author seems so lucid that the reviewer thinks best to add same in his own words:

1. The injection of 10 drops of osmic acid in 2 per cent solution into sensory nerve trunks is safe. The likelihood of irritation of the kidney, however, should not be forgotten in cases exhibiting kidney lesions. It is not probable that the death from cerebral hemorrhage three months after injection of the acid was due in any sense to the injection.

2. Injections into the inferior dental or other nerves should be made through the mouth, since infection of the wound and necrosis may result, with consequent failure in the action of the acid.

3. Immediate relief should not always be expected, nothwithtsanding the cases of Bennett and Murphy were all immediately relieved No one of my cases, even those in which the acid was accurately injected into the nerve trunks and into the perineurial fat, was promptly relieved, relief coming in from one to two weeks. The observations on this point of Wright, who had a large experience with osmic acid injections, correspond to mine.

4. There is very little doubt that the stretching of the nerve trunk, necessarily incident to the injection, is productive of good, supplementing, as it must, the action of the acid. There is, therefore, no good reason why the stretching should be avoided intentionally, except perhaps for experimentation.

5. In the case of small nerves, it will be found exceedingly difficult to inject directly into the nerve trunk, that is, the needle eye will pass to the distal side of the threadlike nerve or perhaps not enter the nerve substance at all. Or, notwithstanding the utmost care, the fibers may be so teased apart by the needle point that the fluid will simply be spilt about the nerve. In such a case, in order to bring the acid in contact with all of the fibers, it is wise to clip the nerve so that the end may be bathed in the fluid.

6. The effect of manipulation of the nerve, as by stretching, has not as yet been eliminated as a possible aid to the chemical action of the osmic acid; therefore, a general anesthetic should be administered so that neurectasy or section of the nerve may be done if desired.

7. My experiments have shown no changes in the nerve tissues as the result of injections of osmic acid other than the disintegration of fat and oil globules in the perineurial space and in the white matter of Schwann, such white matter of Schwann being simply fatty matter in a fluid state insulating and protecting the essential part of the nerve. The degenerations appearing in the nerve itself are only as may be fairly attributed to nutritional changes and exposure, the indirect result of the selective action of osmic acid of destroying fat. There is no reason why this fat should not be restored and the nerve again become capable of transmitting sensation, that is, theoretically, the neuralgia may return after injections of osmic acid.

8. Osmic-acid injections are uncertain in effect as to the cure or relief of neuralgia.

9. A large percentage of cases of neuralgia will be relieved for months by osmic-acid injections.

10 The injections of osmic acid for the relief of tic douloureux is justifiable, even if it should become necessary to repeat the injections at intervals of a few months, particularly in view of the unfavorable results of the so-called radical operations.

11. The local irritation produced by the acid and the remote and irritant effects are not serious in their consequences and have no meaning as to the effect of the osmic acid in relieving neuralgia.

12. The solution of osmic acid should be made fresh for each operation, as deterioration is rapid.

13. Pain persisting several days in a small circumscribed area means that the filaments supplying this area have not been acted on by the acid. The acid usually finally destroys such filaments. It may become necessary, however, to open a wound for the purpose of injecting such filaments.

14. Mere subcutaneous injections are of little or no value.

THERAPEUTICS.

W. T. HIRSCHI, M.D.

The Diet for Gastric Ulcer.— Lenhartz (Med. Klinik., No. 52, 1905) does not approve of the old Ziemisen-Leube regime which consists largely of milk, for the reason that either subnutrition follows which increases the anemia and causes the ulcer to heal less rapidly, or if sufficient milk is taken to nourish the patient properly (about 3L. a day) the stomach becomes dilated and overloaded, again retarding the healing of the ulcer. He proposes a diet of small volume non-irritating to the ulcer, being highly nutritious and containing a fair amount of albuminous substances, to furnish a sufficient amount of nourishment and combine freely with an excess of hydrochloric acid. From one to eight eggs are given at first raw, and later soft boiled. These can be eaten soon after a slight hemorrhage. Milk beginning with about 100 ccm. and gradually increasing to one liter is also permissible. Sugar from 20 to 50 grams, and near the end of the first week finely scraped beef are well borne. During the second week boiled rice, butter and toast and raw ham may be used. Patients recover more quickly, have fewer relapses, regain their strength and are able to resume work sooner than with the Leube method. Wirsing reports 42 cases and Winkowski 30, which were treated with Lenhartz's method, and they also prefer it to Leube's method. Most patients can easily digest this diet. The advantages of milk diet being partly the small amount of NaCl, can also be achieved by Lenthartz's method by using little salt in the eggs, ham, butter, etc. Winkowski deviates from Lenhartz's method by abstaining from all food drinks and ice pills for several days after a profuse hemorrhage, and nourishes the patient through rectal enemata or subcutaneous injections during this time. The patients are more willing and can easily carry out this method of dieting.

Lumbar Puncture.— (Juincke, Deutsch Med. Woch., Nos. 6, 7, 1905.)—It is barely fifteen years since the author introduced lumbar puncture as a diagnostic and therapeutic measure, but it is very extensively known and used. The removal of some cerebro-spinal fluid in healthy or somewhat diseased patients can be done without danger to the individual. The nature of the fluid and the pressure under which it is removed should be noted. If albumins in excess of 0.5% are present an inflammation or venous stasis are to be expected. The normal specific gravity is 1006-1007, and the freezing point is 0.56 to 0.75 deg. The normal pressure is about 125 mm. water; respiratory movements cause it to vary about 20 mm. The patient is placed in a horizontal, left side position, with lumbar kyphosis. Insert the needle in the third interstitial (lumbar) region. For diagnostic purposes and under normal pressure 1-5 ccm. may be removed, but the pressure should not sink below 100-80 mm. In increased pressure it should not fall below 120 mm. Never use suction. After puncture the patient must remain in bed at least twenty-four hours and receive no alcohol. Juincke considers an angioneurotic hydrocephalous as a cause of the severe headaches in many cases of chlorosis migraine and similar paroxysmal cerebral affections.

The Treatment of Pneumonia.—Fraenkel (Therapie de Gegenwart, No. 1, 1906) advocates the use of digitalis according to Traube, only that Fraenkel uses it in larger doses. He does not give more than 0.4 of the infusion in twenty-four hours, and does not continue it more than two or three days to regulate the heart action and arterial pressure. Digitalis was used only in severe infections with a very frequent pulse and low arterial tension. Digitalis increases systolic contraction, gives the heart a better chance to fill during diastole and slows the pulse, through irritation of the vagus centre. It also acts somewhat as an antipyretic. The cumulative

action of digitalis must not be overlooked. Fraenkel uses digitalis if he sees the case inside the first three days; if no arteriosclerosis, organic heart disease or chronic nephritis are present. If digitalis is used later in the disease it must be given in smaller doses and with greater caution. Formerly the collapse was considered as being due to cardiac insufficiency and the vasomotor action was ignored, but now the vascular paralysis is considered the chief cause of collapse. The arterial paresis is due to the large amount of bacteria in the blood. The arterial tension is reduced in about 66% of all cases, and is never absent in the most severe infection. The hearts of pneumonia patients which terminate fatally rarely show marked pathologic changes. At times the right ventricle becomes incompensated on account of the great resistance in the lesser circulation. Caffein stimulates the vasomotor centre and is indicated in pneumonia, with low arterial tension, high frequency and cyanosis with dyspnea. It is best given hypodermatic in 10% solution, using from 10-25 grains in twenty-four hours. Caffein produced insomnia and cerebral irritation in 10% of these patients. Caffein may be combined with digitalis camphor or alcoholic stimulants in the treatment of severe cases.

Digitalis Therapy.—(F. Umber, Die Therapie der Gegenwart, No. 1, 1906.)—The correct indications and methods of administering digitalis are very essential to obtain good results. The great variability of digitalis has led various experimenters to isolate the active principles, e. g., digitalin and digitoxin, while others advocate dialysed digitalis. Digitalin is almost insoluble, resorbed with difficulty, readily disorganized in the stomach and at times produces alarming symptoms. Digalen (soluble digitalin) is used subcutaneously, intravenous and internally. The writer used digalen in sixty cases suffering from cardiac lesions. He observed that digalen similar to other digitalis preparations if given in therapeutic doses in well compensated cardiac lesions has little effect on blood pressure and diuresis, and at times produces irregularity in the pulse. With incompensation digalen increases blood pressure, diuresis and the pulse becomes less frequent. At times digalen or digitalis act more promptly if combined with a diuretic, e. g., diuretin, caffein natrio benzoic or agurin. Circulatory disturbances due to vasomotor paresis occurring during acute infectious diseases should be treated by combining diuretics with cardio-vascular stimulants. Digalen produces little pain at the site of injection if administered intravenous, but is quite painful if used subcutaneous. For the prolonged use of digitalis, neither digalen or digitoxin are to be used, as they have a more rapid cumulative action than the original drug.

The Treatment of Goitre.— Hildebrandt (Therapie der Gegenwart, No. 1, 1906) uses the usual classification parenchymatous, fibrous, vascular, cystic, colloid and those with calcareous deposits. The internal administration of iodine or iodine containing substances, e.g., thyroid glands is often beneficial, but owing to the resulting loss of weight and cardiac irritation it must be used rationally. Surgical interference is necessary if the goitre interferes much with respiration. Large cysts are at times enucleated successfully. Vascular goitres may be improved by ligating the larger vessels. The dangers in surgical interference are postoperative hemorrhage and pneumonia.

DERMATOLOGY.

ROBERT H. DAVIS, M. D.

A Note on the Spirochaeta Pallida.—Herman (N. Y. Med. Jour., Dec. 9, 1905) says that, at the present moment, it cannot be said with certainty that this organism does, or does not, play a part in the causation of syphilis. To base a positive diagnosis on its presence, or to exclude syphilis on its absence, is certainly premature. If a diligent search is made, the micro-organism will be found in the majority of cases of syphilis, most frequently in the secondary stage, especially in the latter manifestations; less frequently in the primary lesions, the lymphatic glands, and the blood; and rarely in the tertiary manifestations of the disease. Recently it has been demonstrated in the serum of blisters artificially produced on syphilitics. The author gives the following method for this procedure, which has the advantage of being both simple and rapid: A small pad of gauze, one-half an inch square, is saturated with strong ammonia (28%), and then applied. It is covered by a watch glass to prevent evaporation, and this may be conveniently held in place by a rubber band, if the application is made to an extremity. This is allowed to remain for three or four minutes. The gauze pad is then removed. In about fifteen minutes a vesicle begins to form, from which the serum is collected in a capillary tube (such as is used for vaccine), and sealed. A portion can be used for the examination of the organism in the hanging drop. It has been claimed by Thesing that organisms morphologically identical with the spirochaeta pallida may be found in the fluids

used for staining this organism. Granting that this is the case, they might still be different. "In all probability there are a number of varieties of spirochaetae, and it is fair to assume that some of these resemble each other very closely in their morphology and in their tinctorial reactions as seen under the microscope." (Compare the tubercle and lepra bacillus.) Organisms morphologically identical with the spirochaeta pallida have been found by a few investigators in non-syphilitic lesions. Hoffman examined several cases of ulcerating carcinomata, and found spirochaetae which could not be easily distinguished from the pallidae. He stated that there were some very fine morphological differences, but did not say what they were. This objection might be met in the same manner as the first. Though morphologically similar, they might still be entirely different. The fact that the organism is difficult to find, more especially in the blood of syphilitic patients, does not disprove their possible causative significance. The same is true in other conditions, such as tuberculous meningitis, for only very long and diligent search will discover the tubercle bacillus in the cerebro-spinal fluid. The author claims that the length of the spirochaetae, as seen under the microscope, is a variable quantity, and that the thickness depends, to some extent, at least, on the method of fixation and staining. When the specimens are fixed with alcohol, the organisms are apt to appear somewhat finer. When stained by the Giemsa method, they appear finer than when some other methods (e.g., Loeffler's method for flagella) are employed. This may depend upon the fact that the Loeffler method stains also the envelope which surrounds these organisms. The number and depth of the coils of each spirochaeta is also a variable quantity, and depends on the vitality of the organisms, in part at least. The spirochaeta pallida has been found in the lymphatic glands, in the papules, and in the blood of syphilitic patients; that is, at points distant from the primary lesion. This, however, is not pathognomonic. Spirochaetae have been found at some distance from the primary lesion in non-syphilitic cases, for example, in a metastatic abscess of the femur, the primary lesion being in the lung; in the bone marrow of the femur, and in the muscle of the small intestine in a case of severe anemia; and in the cervical and submaxillary glands in a case of noma. The successful inoculations, says the author, that have been made with the syphilitic virus do not prove that the spirochaeta pallida is the sole, or most important, micro-organism concerned, for no inoculations have, as yet, been made with the spirochaeta pallida alone. His final conclusion is, that, at present, it does not appear probable that the spirochaeta pallida is the sole cause of syphilis, and that, if it does play a part, it represents only one stage in the life of a protozoon which is the cause.

A Study of Some Cases of Epidermolysis Bulbosa with Remarks upon the Congenital Absence of Elastic Tissue.— Engman and Mook (Jour. Cut. Dis., Feb, 1906) cite four interesting cases of this rare malady, and give the results of exhaustive microscopical examinations of sections from two of these. These sections were stained with a variety of stains, and the most striking finding was, as indicated in the title, the practical absence of elastic tissue in the papillary and subpapillary regions of the derma, and its sparse distribution and deformity in the deeper regions This absence of elastic tissue was not due to the constant moisture (from the edema) in the skin of the patient, as there was an absence, also, of degenerated elastic fibres and elacin. Also, elastic fibres are very resistant to edema. They put forward the view that "this absence of elastic tissue in the upper portion of the derma could explain the histologic picture in the normal skin of these patients, and the clinical phenomena characteristic of this affection." "It is thought that elastic tissue acts as a support to the cutis, giving it tenacity and tone, and, in this way having a controlling action over its lymphatic and capillary circulation, besides acting in a similar capacity in its situation in the walls of the larger vessels." If the elastic tissue be absent from the upper portions of the derma and deficient in its lower portion, we would expect to find the cutis bathed with moisture from the loss of tone of the capillaries, and a partial stasis from the deficiency of this tissue in the deeper portions of the cutis. The tissue being thus constantly bathed with serum we would expect to find a chronically sodden and weakened epidermis which could be easily detached from the underlying tissue on pinching and traction (a peculiar characteristic of this trouble), as the elastic fibres which normally mount from the cutis to the epidermis are absent. "When trauma is occasioned, the consequent reaction, not having the usual control exerted over it by the elastic tissue, would allow an excessive flow of serum into the tissues, which would seek the place of least resistance, and dissect or lift up, the chronically sodden epidermis into a bulla. The pale scars are due to (1) secondary infection; (2) complete destruction of the epidermis over a large area, when no islands of epidermic cells are left upon the floor of the bulla for regeneration,

and (3) by the poor effort of the elastic tissue to regenerate. "There are several cases cited in literature where the affection disappeared later in life, at the time when, according to Ravogli and others, there is an increase in the elastic fibres."

SOCIETY PROCEEDINGS

MEDICAL SOCIETY OF THE MISSOURI VALLEY.

This progressive body, now in its nineteenth year, has forged its way to the front, and has become one of the best, if not the largest, independent organizations in the United States. Composed of able, active men, and drawing from seven of the largest states in the middle West, this association has become a factor in the medical affairs west of the great Missisippi river. The sessions of this society are devoted entirely to scientific work, and the papers read before it are both entertaining and instructive. Its sessions are held in the spring and fall. The good work accomplished by this body of earnest men is a matter of history, and a most commendable feature of these meetings is that no time is devoted to ethical, political, or personal debate, and "society politics" is an unknown quantity in its ranks.

For the above reasons, as well as many others we would recommend this society to our readers. If you want a real intellectual feast and a season of social intercourse with a congenial body of scientific men, attend the next meeting at St. Joseph, March 22 and 23. A pleasant feature of this meeting will be the attendance of the presidents of the State associations within the province of the Missouri Valley.

Headquarters, Hotel Metropole.

EXCURSION TO EXCELSIOR SPRINGS.

A cordial invitation for the society to visit Excelsior Springs has been received by the secretary, from the Commercial Club and Medical Society of that popular resort, and arrangements are being made for train service to accommodate our members. Excelsior Springs is a famous watering place twenty-five miles from Kansas City and forty miles from St. Joseph, the waters of which have a world wide reputation. An opportunity will be afforded our members at this time to visit this picturesque and attractive resort, through the courtesy of its citizens and medical profession. Special rates will be obtained on the railroads. It is probable that a special train will leave St. Joseph on Friday afternoon, March 23, and returning on Saturday, although many will no doubt spend Sunday at the Springs. Bring your wives and daughters and enjoy an outing of a few days in the "Carlsbad of the West."

Following is the preliminary

PROGRAM:

N. S. Davis, Jr., Chicago, Oration on Medicine.

L. L. McArthur, Chicago, Oration on Surgery—"Surgery of Intestinal Tuberculosis."

C. H. Mayo (President of Minnesota State Medical Association), Rochester, Minn., "Surgical Treatment of Goitre."

Wm. Jepson (President Iowa State Medical Association), Sioux City, Ia., "Prostatism and Its Management.

D. C. Gore (President Missouri State Medical Association), Marshall, Mo., "State Medicine."

Fenton B. Turck, Chicago, "Medical and Surgical Treatment of Gastric Diseases."

A. F. Jonas (President Nebraska State Medical Association), Omaha, Neb., subject not announced.

S. Grover Burnett, Kansas City, "Some Pathology of the Morphine Habit, and My Preferred Method of Treatment."

Prince E. Sawyer, Sioux City, Ia., "Curettage of the Uterus; Its Dangers."

Bernard A. McDermott, Omaha, "Some Principles in the Treatment of Rupture of the Male Urethra."

C. O. Thienhaus, Milwaukee, Wis., "Review of My Operations for Total Prolapse of the Uterus."

Wm. F. Waugh, Chicago, "Cardiants."

Palmer Findley, Chicago, "Limitations in the Indications for Vaginal Caesarean Section."

Chas. E. Bowers (President Kansas State Medical Association), Topeka, Kas., "Treatment of Patients Desperately Ill in Consequence of Accident."

A. E. King, Blockton, Ia., "Rachitis."

Wm. Frick, Kansas City, "Blarto-Mycetic Dermatitis, with reports of cases."

F. E. Coulter, Omaha, "Tumors of the Cerebellum, with report of a case."

D. W. Basham, Wichita, Kas., "Simultaneous Existence of Extra- and Intra-Uterine Pregnancy."

J. C. Waterman, Council Bluffs, "Functional Disorders of the Stomach, accompanied by Hypersecretion."

M. M. Edmonson, Kansas City, "Club Foot, with special reference to Post-operative Treatment."

Marc Ray Hughes, St. Louis, "Some Notes on Pathology of Epilepsy."

W. F. Milroy, Omaha, "Indirect Effects of Valvular Lesions."

Frank Parsons Norbury, Jacksonville, Ill., "Individual Treatment of Borderline Cases of Mental Disease."

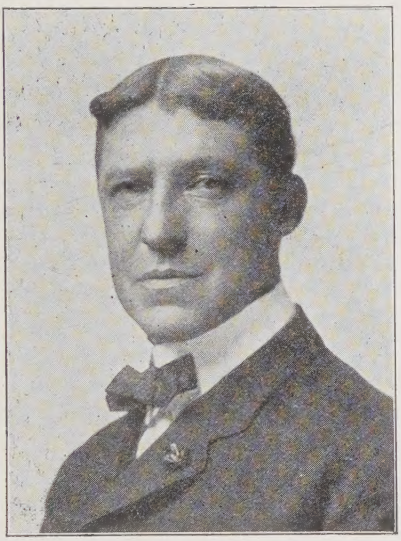
T. C. Witherspoon, St. Louis, "Removal of the Uterus in Certain Inflammatory Conditions."

R. D. Mason, Omaha, "Some Advances in the Office Treatment of Rectal Diseases."

R. C. Moore, Omaha, "The County Sanatorium for Pulmonary Tuberculosis."

L. J. Dandurant, St. Joseph, "Ligation of Common Femoral Artery for Large Aneurism in Scarpa's Triangle; recovery; presentation of patient."

E. T. Shelly, Atchison, Kas., "The Expectant Mother."



DR. JOHN E. SUMMERS, Omaha,
President Medical Society of the Missouri Valley.

John P. Lord, Omaha, "The Surgery of the Paralyses."

A. H. Cordier, Kansas City, "Exhibition of an Interesting Specimen."

Herman E. Pearse, Kansas City, "Catheterization of the Ureter in the Female."

OFFICERS.

President—J. E. Summers, Jr., Omaha.

First Vice-President—C. H. DeWitt, Glenwood, Ia.

Second Vice-President—C B. Hardin, Kansas City.

Treasurer—Donald Macrae, Council Bluffs.

Secretary—Chas. Wood Fassett, St. Joseph.

Arrangement Committee—Jacob Geiger, O. B. Campbell, C. R. Woodson, St. Joseph.

INTERNATIONAL MEDICAL CONGRESS.

The XVth International Medical Congress at Lisbon, bids fair to be one of unusual importance, and, although the number of congressists will be smaller than when it has been held in some of the larger capitals, it will be more select, and papers will be presented by some of the leading lights of the profession in Europe.

J. H. MUSSER, M. D.
Chairman American National Committee.

The meetings of the congress will be held at the Medical School of Lisbon, which is a very large and spacious buildng, and will be under the patronage of the King and Queen of Portugal.

The meetings of the sections will take place in the various halls of the building, besides which there will be others devoted to the comfort of the congressists. The largest hall of the building will be a general loafing or clubroom, in which the congressists can read, write and converse, while two adjoining rooms of large size will be reserved for the ladies of the party. On the terrace of the University there will be a buffet where the physicians can walk about or sit down and have refreshments served at all hours of the day. Everything will be under one roof, and everyone will know where to find every thing connected with the Congress, as well as everything that is needed in a general way. There will be the office of the president, secretary and treasurer of the Congress; telephone room; typewriting room; press room; information room, where one can find out all particulars regarding the various

routes of travel; halls for showing different apparatus; amphitheaters for giving lantern exhibitions; a postoffice and telegraph office; registration room; money exchange; and a room where papers, cigars, cigarettes, etc., will be on sale.

The opening exercises will take place on the first day of the Congress in the hall of the Geographical Society in the Geographical Society building, where a colonial exposition will take place during the meeting of the Congress, under the auspices of the sections on colonial and naval medicine.

There will be a number of addresses or orations delivered each afternoon at the general meeting by distinguished representatives of different countries. Sir Patrick Manson will represent England; Prof. E. von Bergmann, Germany; Prof. Reclus, Paris; Prof. Newman, Austria; Prof. Prince Jean Tarschanoff, Russia; Prof. Azevedo Sodre, Brazil; Dr. Jose Esquerdo, Spain; Dr. P. Aasor, Norway. The names of those from other countries have not as yet been given out. Dr. Nicholas Senn of Chicago, has been invited to deliver the oration for the United States.

NICHOLAS SENN, M.D.
Who will deliver the Oration for the United States.

The amusements for the congressists will be a Portuguese bull fight, three large general fetes, and receptions and dinners de gala. All communications regarding the scientific part of the Congress should be addressed to Dr. Ramon Guiteras, secretary of the American National Committee. All questions regarding transportation to Lisbon and return should be addressed to Dr. Charles Wood Fassett, editor of the Medical Herald, St. Joseph, Mo., who has in charge the American party, which will sail April 7th. Those who join this party will have no worry concerning hotel reservations, or other details, as all will be provided for in advance by the well-known firm of Thos. Cook & Sons.

THE MEDICAL FORTNIGHTLY

A Cosmopolitan Biweekly for the General Practitioner

The Medical Fortnightly is devoted to the progress of the Practice and Science of Medicine and Surgery. Its aim is to present topics of interest and importance to physicians, and to this end, in addition to a well-selected corps of Department Editors, it has secured correspondents in the leading medical centers of Europe and America. Contributions of a scientific nature, and original in character, solicited. News of Societies, and of interesting medical topics, cordially invited.

Advertising forms close on the first and fifteenth of each month. Time should be allowed to submit proof for correction Advertising rates on application.

Remittances and business communications should be addressed to the Fortnightly Press Co.

Subscription, $2.00 a year, in advance, including postage to any part of the United States, Mexico and Canada. Postage to foreign countries in the Universal Postal Union, including Newfoundland, $1.00 a year additional. Entered at the St. Joseph post-office as second-class matter.

The Medical Fortnightly will not be discontinued at expiration of subscription, as many of our readers prefer not to have their files broken on account of failure to remit. Unless we receive a distinct request to discontinue, and payment for all arrearages, this magazine will not be discontinued.

Subscriptions may begin at any time; volumes end with June and December.

Contributors should understand that corrected typewritten copy is essential to clean proof and prompt publication, and is much more satisfactory than manuscript. Original articles should be as condensed as justice to the subject will allow.

Editorial offices in St. Louis, Jacksonville, and St. Joseph, where specimen copies may be obtained, and subscriptions will be received.

Contributions and books for review should be addressed to the editors, 319 and 320 Century Building, St. Louis, Mo.

QUEEN AMELIE, of Portugal, who is a Doctor of Medicine, will be honorary president of the Fifteenth International Medical Congress, which convenes in Lisbon on April 19th.

EXCURSION TO BOSTON.—Plans for a "Missouri Valley" excursion party to Boston are in progress, to attend the meeting of the American Medical Association in June. The trip will include a boat ride down the St. Lawrence river, and short stops at Niagara Falls, Montreal and other interesting points. For information address the secretary, Dr. Chas. Wood Fassett, St. Joseph, Mo.

AIR DE LUXE.—W. P. Northrup says that civilized man has learned how to eat and drink and how to wash, but he has not yet learned how to ventilate The author depicts the unhygienic conditions existing in most places of public assemblage owing to the lack of fresh air, and says that the need for reform in this regard is also great in private dwellings. The curse of modern living is overworking, overheating, and lack of ventilation, not to mention worry and hasty eating. The suggestion is made of utilizing the roofs of dwelling houses as sources of fresh air, by constructing roof gardens.—Medical Record.

MEDICAL MEMORANDA.

It is very gratifying to me to testify of the merits of resinol soap. In conjunction I am also giving testimony of more than a dozen of my friends who have used it through my personal recommendation. For soothing and making the skin smooth after shaving it has no parallel, to say nothing of that indescribable feeling experienced in its effects after a bath —J. A. Wright, D. D. S., 2902 State street, Chicago, Ill.

Cystogen-Lithia Tablets.—This effervescent tablet is of interest to physicians as it affords the means of employing the uric acid solvent and genito-urinary antiseptic properties of cystogen augumented by the alkaline and solvent action of the lithia salt. The value possessed by the salts of lithia as uric acid solvent, diuretic and ant-acid are available in this preparation. It is a most happy combination, displaying all of the desirable effects of both cystogen and lithia. The effervescence brings about a quick solution in water, producing a perfectly tasteless solution. Water that is too cold retards the effervescence. It may therefore be conveniently taken at meal time in a glass of water. In cases where this method of administration is contra-indicated, it may be taken between meals, always dissolved in considerable water. These tablets being effervescent need to be protected from atmospheric conditions, and for this reason are packed in glass tubes containing one dozen tablets in each. Three tubes are packed in a small cardboard box. A tube may be conveniently carried in the vest pocket, so that patients may be expected to take the medicine with regularity. Samples supplied to physicians on request to the Cystogen Chemical Company, St. Louis, Missouri.

Iodide of Iron is an extremely valuable medicament owing to the properties of its two constituents: iodine, which has a stimulating action on those blood elements whose role is to protect the system against micro-organisms and noxious bacilli, and iron, which is a reconstituent of recognized value. As the action of iodide of iron absolutely depends on its purity the efforts of all manufacturing chemists are directed to this purpose. The ordinary,commercial iodide of iron pills all contain impure iodide of iron; besides they are frequently dangerous on account of the insolubility of their coating. The genuine Blancard's pills contain 5 centigrammes of strictly unchangeable iodide of iron. The physician need only split open one of the pills, either with his finger nail or the blade of a knife, to see that the resulting section is of the greenish color which characterizes the unchanged proto-iodide of iron. The genuine Blancard's pills are made entirely by hand, they are covered with a protective coating which dissolves in the gastric and intestinal juices; as it slowly dissolves in the digestive tube assimilation is complete without causing irritation to the mucous membrane with which it comes in contact. The greenish white color of Blancard's syrup of iodide of iron proves that it contains unchangeable iodide of iron (in the proportion of two grains to the tablespoonful), because the syrups in which chemical changes have taken place are always of a yellowish tint. Mr. Blancard's process received many years ago the endorsement of the Paris Academy of Medicine, and pills and syrup are still being manufacured in the same premises in Paris, by his grandsons Mess. Bertaut-Blancard Brothers, who yearly ship many thousands of bottles all over the civilized world, where they are daily prescribed by the medical profession.

Anedemin (opposed to edema) is a scientific combination of three of the more recently investigated members of the digitalis series; its components, the active principles of strophanthus hispidus, apycynum cannabinum, urginea scilla, with sambucus as adjuvant, are so chemically treated and disposed as to eliminate all toxic principles. Of great potency through the collaboration of its components, anedemin is claimed to be vastly superior to digitalis, elaterium and the remedies commonly prescribed for the removal of dropsical effusions and possesses none of their disagreeable properties. Anedemin has no cumulative action, is non-toxic, producing no gastro-intestinal disturbance. It does not produce vasomotor contraction like digitalis; on the contrary, it is a vasomotor dilator and increases the arterial output. It is claimed to be superior to the remedies commonly employed in the treatment of dropsies from the fact it acts less upon the medullary and peripheral nerves. Acting upon the circulation the collaborative effects are to accelerate the flow in the thoracic duct, rapidly returning the serum to the blood by the lymphatic channels, as well as by resorption into the blood, from whence it is removed by purgation and diuresis. It is a restorer and maintainant of perfect balance between the arterial and venous system. It increases both the nutrition and power of the cardiac muscle, increasing the arterial output, emptying more completely the chambers and diminishing regurgitation. It is far superior to digitalis as a stimulant of the renal function, removing large quantities of urine, eliminating the toxins, forestalling uremia. The transudation of the glomeruli is increased, renal congestion relieved and reparation of parenchyma and interstitial structures brought about. The action of anedemin upon the liver is such as to dilate both hepatic and portal vessels, improving both the nutrition of the hepatic cells and interlobular structures, and relieving ascitic tension. In brief it is claimed anedemin will prevent a renewal of the dropsical effusion and an increase of the lesion which exists in the majority of cases; and, in apparently hopeless incurables, if not curative, will often do much to prolong life and secure as much improvement of health as is compatible with existing structural lesions. Its formula has been built up by large and wide application and found to yield positive benefits and definite results when all other combinations have failed.

THINK THIS OVER

Digestion Depends Upon Absorption

If the digestive tract can not absorb what is digested then digestion stops.

Why should you plaster the mucosa with bismuth or shrivel and harden it with bitters when you want to aid digestion and absorption.

(Wrong stimulations is always followed by a reaction.)

Wash off the mucosa by drinking pure water the first thing in the morning and then use

PEPTENZYME

(Nucleo-enzymes R. & C.)

which stimulates absorption in nature's own manner at the same time aiding digestion.

Think this over again, and then write for literature and samples, and prove for yourself that Peptenzyme differs radically from all other so-called digestives.

REED & CARNRICK,
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Do not jeopardize your patient's life by patronizing a druggist who will substitute.

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